UNIVERSITY OF CALIFORNIA
SAN FRANCISCO MEDICAL CENTER
LIBRARY

MDCCCLXVIII

EX LIBRIS

Digitized by the Internet Archive
in 2016 with funding from
The National Endowment for the Humanities and the Arcadia Fund

https://archive.org/details/michiganmedicine652unse

MICHIGAN MEDICINE

JULY, 1966 — PUBLISHED MONTHLY -- MICHIGAN STATE MEDICAL SOCIETY

This art work is a reproduction of the cover of the new "Horizons Unlimited" career pocketbook published by the AMA . . . adapted by MSMS for use in Michigan with an eight-page insert telling students where they can pursue 51 different health careers in Michigan at 116 colleges, hospitals and institutions. This booklet is MSMS's newest attempt to inform and motivate young people to consider the rewarding careers in the fields of medicine and health.

101st ANNUAL SESSION
SEPTEMBER 27-28-29-30, 1966
GRAND RAPIDS, MICHIGAN

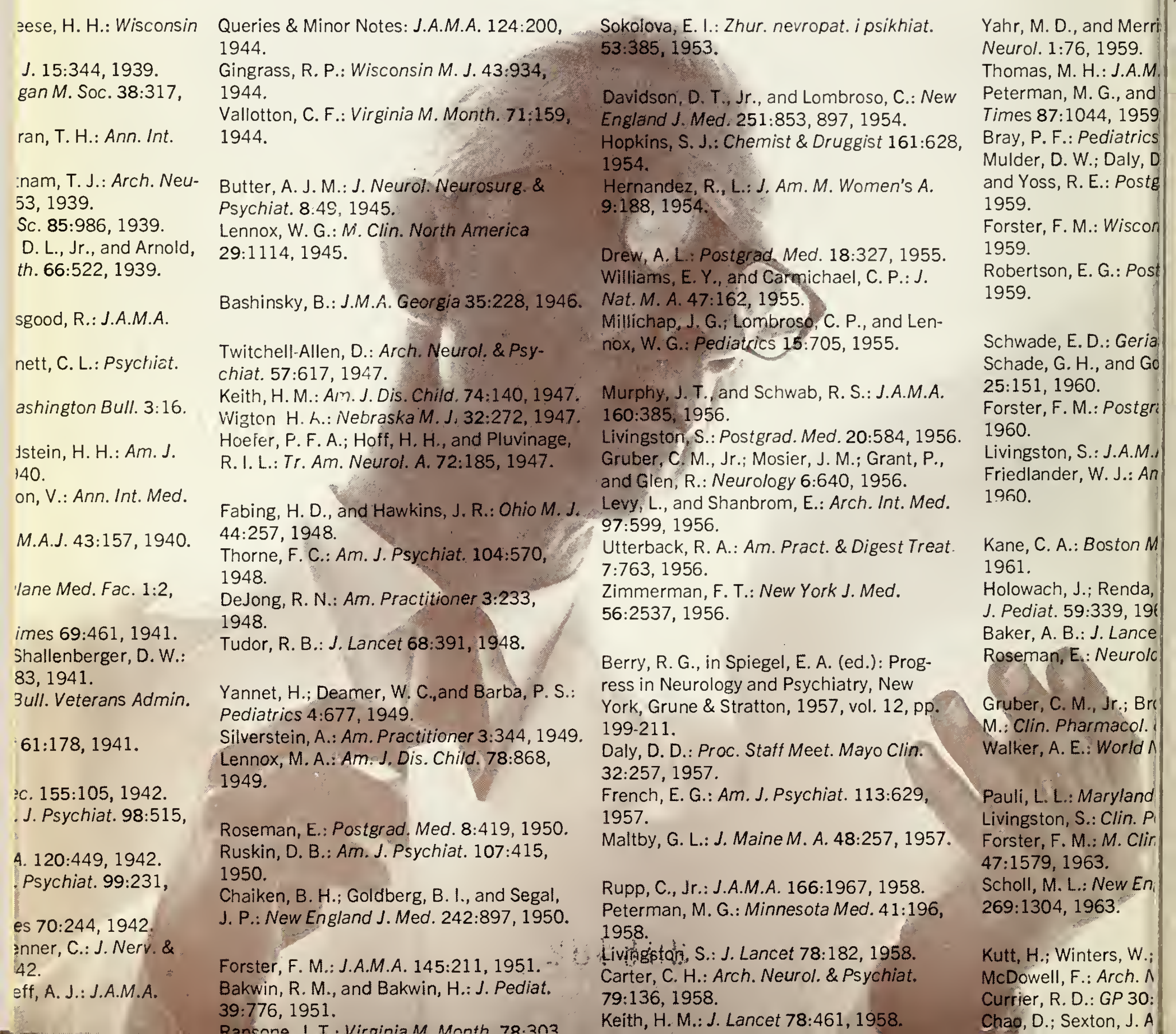
U.C. MEDICAL CENTER LIBRARY
JUL 11 1966
San Francisco 22,

Dilantin®
(diphenylhydantoin)
PARKE-DAVIS

27 years of clinical use... and still the most widely prescribed agent of its kind

Complete information for usage available to physicians on request. 81966

PARKE-DAVIS
PARKE, DAVIS & COMPANY, Detroit, Michigan 48232
1866 1966 100th ANNIVERSARY



ɜese, H. H.: *Wisconsin*

J. 15:344, 1939.
gan M. Soc. 38:317,

ran, T. H.: *Ann. Int.*

:nam, T. J.: *Arch. Neu-*
53, 1939.
Sc. 85:986, 1939.
D. L., Jr., and Arnold,
th. 66:522, 1939.

sgood, R.: *J.A.M.A.*

nett, C. L.: *Psychiat.*

ashington Bull. 3:16.

ɟstein, H. H.: *Am. J.*
ʲ40.
on, V.: *Ann. Int. Med.*

M.A.J. 43:157, 1940.

'lane Med. Fac. 1:2,

imes 69:461, 1941.
Shallenberger, D. W.:
83, 1941.
Bull. Veterans Admin.

61:178, 1941.

ɛc. 155:105, 1942.
. J. Psychiat. 98:515,

ʌ. 120:449, 1942.
. Psychiat. 99:231,

es 70:244, 1942.
ɜnner, C.: *J. Nerv. &*
42.
eff, A. J.: *J.A.M.A.*

Queries & Minor Notes: *J.A.M.A.* 124:200, 1944.
Gingrass, R. P.: *Wisconsin M. J.* 43:934, 1944.
Vallotton, C. F.: *Virginia M. Month.* 71:159, 1944.

Butter, A. J. M.: *J. Neurol. Neurosurg. & Psychiat.* 8:49, 1945.
Lennox, W. G.: *M. Clin. North America* 29:1114, 1945.

Bashinsky, B.: *J.M.A. Georgia* 35:228, 1946.

Twitchell-Allen, D.: *Arch. Neurol. & Psychiat.* 57:617, 1947.
Keith, H. M.: *Am. J. Dis. Child.* 74:140, 1947.
Wigton H. A.: *Nebraska M. J.* 32:272, 1947.
Hoefer, P. F. A.; Hoff, H. H., and Pluvinage, R. I. L.: *Tr. Am. Neurol. A.* 72:185, 1947.

Fabing, H. D., and Hawkins, J. R.: *Ohio M. J.* 44:257, 1948.
Thorne, F. C.: *Am. J. Psychiat.* 104:570, 1948.
DeJong, R. N.: *Am. Practitioner* 3:233, 1948.
Tudor, R. B.: *J. Lancet* 68:391, 1948.

Yannet, H.; Deamer, W. C., and Barba, P. S.: *Pediatrics* 4:677, 1949.
Silverstein, A.: *Am. Practitioner* 3:344, 1949.
Lennox, M. A.: *Am. J. Dis. Child.* 78:868, 1949.

Roseman, E.: *Postgrad. Med.* 8:419, 1950.
Ruskin, D. B.: *Am. J. Psychiat.* 107:415, 1950.
Chaiken, B. H.; Goldberg, B. I., and Segal, J. P.: *New England J. Med.* 242:897, 1950.

Forster, F. M.: *J.A.M.A.* 145:211, 1951.
Bakwin, R. M., and Bakwin, H.: *J. Pediat.* 39:776, 1951.
Ransone, J. T.: *Virginia M. Month.* 78:303

Sokolova, E. I.: *Zhur. nevropat. i psikhiat.* 53:385, 1953.

Davidson, D. T., Jr., and Lombroso, C.: *New England J. Med.* 251:853, 897, 1954.
Hopkins, S. J.: *Chemist & Druggist* 161:628, 1954.
Hernandez, R., L.: *J. Am. M. Women's A.* 9:188, 1954.

Drew, A. L.: *Postgrad. Med.* 18:327, 1955.
Williams, E. Y., and Carmichael, C. P.: *J. Nat. M. A.* 47:162, 1955.
Millichap, J. G.; Lombroso, C. P., and Lennox, W. G.: *Pediatrics* 15:705, 1955.

Murphy, J. T., and Schwab, R. S.: *J.A.M.A.* 160:385, 1956.
Livingston, S.: *Postgrad. Med.* 20:584, 1956.
Gruber, C. M., Jr.; Mosier, J. M.; Grant, P., and Glen, R.: *Neurology* 6:640, 1956.
Levy, L., and Shanbrom, E.: *Arch. Int. Med.* 97:599, 1956.
Utterback, R. A.: *Am. Pract. & Digest Treat.* 7:763, 1956.
Zimmerman, F. T.: *New York J. Med.* 56:2537, 1956.

Berry, R. G., in Spiegel, E. A. (ed.): Progress in Neurology and Psychiatry, New York, Grune & Stratton, 1957, vol. 12, pp. 199-211.
Daly, D. D.: *Proc. Staff Meet. Mayo Clin.* 32:257, 1957.
French, E. G.: *Am. J. Psychiat.* 113:629, 1957.
Maltby, G. L.: *J. Maine M. A.* 48:257, 1957.

Rupp, C., Jr.: *J.A.M.A.* 166:1967, 1958.
Peterman, M. G.: *Minnesota Med.* 41:196, 1958.
Livingston, S.: *J. Lancet* 78:182, 1958.
Carter, C. H.: *Arch. Neurol. & Psychiat.* 79:136, 1958.
Keith, H. M.: *J. Lancet* 78:461, 1958.

Yahr, M. D., and Merri
Neurol. 1:76, 1959.
Thomas, M. H.: *J.A.M.*
Peterman, M. G., and
Times 87:1044, 1959
Bray, P. F.: *Pediatrics*
Mulder, D. W.; Daly, D
and Yoss, R. E.: *Postg*
1959.
Forster, F. M.: *Wiscon*
1959.
Robertson, E. G.: *Post*
1959.

Schwade, E. D.: *Geria*
Schade, G. H., and Go
25:151, 1960.
Forster, F. M.: *Postgr*
1960.
Livingston, S.: *J.A.M.*
Friedlander, W. J.: *An*
1960.

Kane, C. A.: *Boston M*
1961.
Holowach, J.; Renda,
J. Pediat. 59:339, 19
Baker, A. B.: *J. Lance*
Roseman, E.: *Neurolc*

Gruber, C. M., Jr.; Br
M.: *Clin. Pharmacol.*
Walker, A. E.: *World*

Pauli, L. L.: *Maryland*
Livingston, S.: *Clin. P*
Forster, F. M.: *M. Clin*
47:1579, 1963.
Scholl, M. L.: *New En*
269:1304, 1963.

Kutt, H.; Winters, W.;
McDowell, F.: *Arch. N*
Currier, R. D.: *GP* 30:
Chao, D.; Sexton, J. A

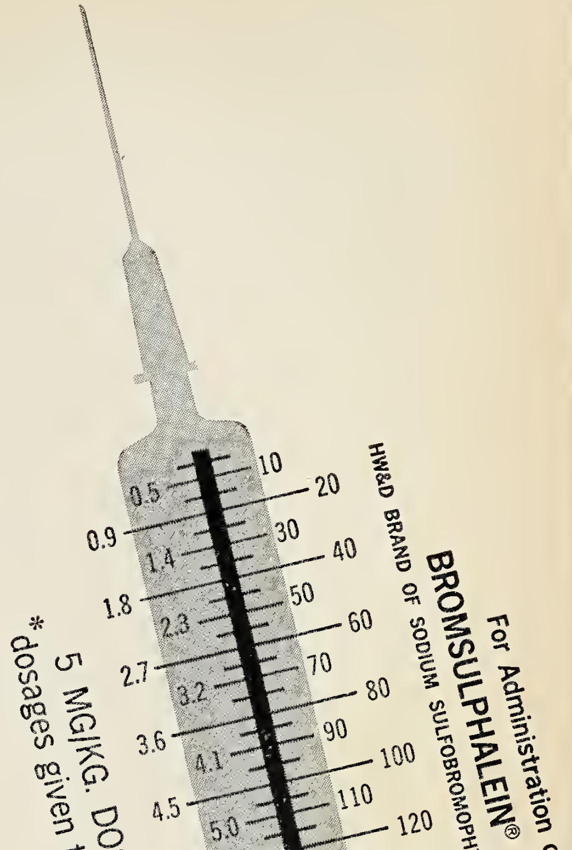
® DISPOSABLE UNIT
P® DISPOSABLE UNIT
P® DISPOSABLE UNIT
SP® DISPOSABLE UNIT
SP® DISPOSABLE UNIT
SP® DISPOSABLE UNIT
BSP® DISPOSABLE UNIT
BSP® DISPOSABLE UNIT
BSP® DISPOSABLE UNIT
BSP® DISPOSABLE UNIT

A RELIABLE, PROVEN PRODUCT . . . The BSP test, introduced in 1925, remains one of the most sensitive laboratory procedures available for determining hepatic function.

A STERILE, CONVENIENT PUT-UP . . . Each BSP Disposable Unit contains: a sterile, glass, disposable syringe with the 5 mg./kg. BSP dosage schedule imprinted on the barrel, a sterile needle, alcohol swab and a 7.5 ml. or 10 ml. size ampule of Bromsulphalein.

The BSP unit is designed for maximum patient protection. The precalibrated syringe makes weight calculations unnecessary and provides for proper dosage regardless of patient-weight.

ECONOMICALLY PACKAGED . . . Prepared for economic unit dispensing, this completely disposable put-up affords a savings in time and labor—the most costly commodities.


For Administration of
BROMSULPHALEIN® (BSP®)
HW&D BRAND OF SODIUM SULFOBROMOPHTHALEIN INJECTION, USP
5 MG/KG. DOSAGE IN ML.
*dosages given to closest 0.1 ml.
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180
190
200
210
220 LBS.
0.5
0.9
1.4
1.8
2.3
2.7
3.2
3.6
4.1
4.5
5.0
5.5
5.9
6.4
6.8
7.3
7.7
8.2
8.6
9.1
9.5
*ML. 10.0

BSP®

BSP® DISPOSABLE UNIT
HW&D BRAND OF SODIUM SULFOBROMOPHTHALEIN INJECTION, USP
(50 mg. per ml.)

HYNSON, WESTCOTT & DUNNING, INC.
BALTIMORE, MARYLAND 21201
(BSP02)
HW&D

206482

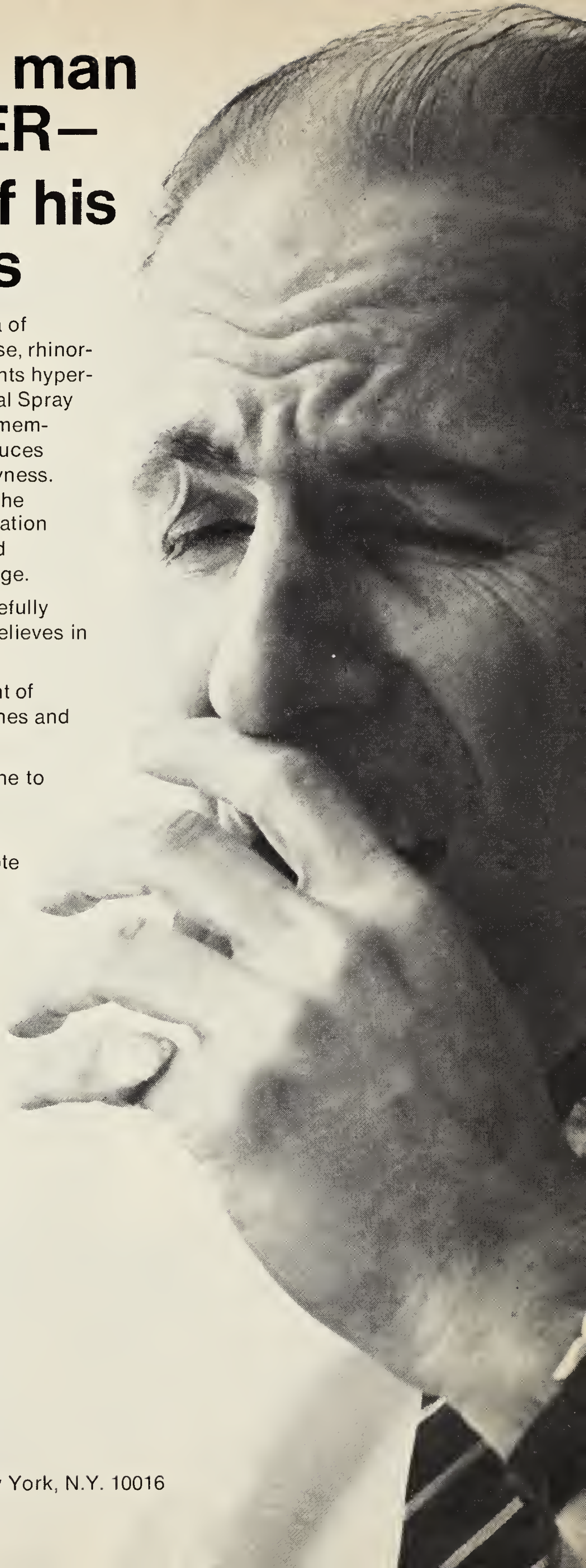
Once merely a man with HAY FEVER— now a victim of his own antibodies

Whatever term describes him in this new era of immunology, the symptoms of congested nose, rhinorrhea and sneezing haven't changed in patients hypersensitive to pollens and molds. But NTZ® Nasal Spray relieves the symptoms. It decongests nasal membranes on contact, relieves itching and reduces excessive rhinorrhea without unpleasant dryness. The first spray of well-tolerated NTZ shrinks the turbinates, helps restore normal nasal ventilation and breathing. After a few minutes, a second spray enhances sinus ventilation and drainage.

More than a simple vasoconstrictor, the carefully balanced formula of effective components relieves in three ways with:

- **N**eo-Synephrine® HCl 0.5%, a decongestant of unexcelled efficacy to shrink nasal membranes and allow more comfortable breathing.
- **T**henfadil® HCl 0.1%, a topical antihistamine to help relieve itching and rhinorrhea.
- **Z**ephiran® Cl 1:5000, an excellent wetting agent and antiseptic preservative to promote the rapid spread of components to less accessible nasal areas.

Supplied in convenient pocket-size plastic spray bottle of 20 ml. Also available as a solution of 30 ml. (1 fl. oz.) with dropper, and 473 ml. (1 pint).



Prescribe

NTZ® Nasal Spray

(contains Neo-Synephrine HCl)

Winthrop Winthrop Laboratories, New York, N.Y. 10016

JULY, 1966
VOLUME 65, NUMBER 7
PUBLISHED MONTHLY BY
MICHIGAN STATE MEDICAL SOCIETY

MICHIGAN MEDICINE

EAST LANSING
MICHIGAN

UBLICATION COMMITTEE
ADLEY M. HARRIS, M.D., Ypsilanti
Chairman
C. HANSEN, M.D., Battle Creek
L. MASTERS, M.D., Fremont
W. MCLEAN, M.D., Detroit
H. RODDA, M.D., Bay City
J. TALLANT, M.D., Detroit
LTON R. WEED, M.D., Grosse Pte.
ark

ientific Editor
EORGE H. LOWREY, M.D.

anaging Editor
ERBERT A. AUER

SMS Executive Director and
siness Manager
UGH W. BRENNEMAN

nterested MSMS members may ain a copy of the AMA "Horizons limited" career booklet, with higan reference pages, from MS, 120 W. Saginaw, East Lan-. The cover of the AMA booklet eproduced on our July cover.

ORIGINAL SCIENTIFIC ARTICLES

529 Educating Tomorrow's Physicians/Morton Levitt, Ph.D., Gordon H. Scott, Ph.D., and Ernest D. Gardner, M.D.
533 Cervical Spondylosis with Neurologic Deficit/E. Latunde Odeku, M.D., and Richard C. Schneider, M.D.
542 The Ocular Toxicity of Chloroquine/Leonard H. Lerner, M.D., Lawrence L. Stocker, M.D., and Robert I. Gans, M.D.
545 Michigan Maternal Mortality Study—A 15-Year Survey/ Hermann A. Ziel, M.D.

SPECIAL ARTICLES

548 Sex Education, Organ Transplants, Seen as Common Concerns of Doctor, Minister
550 Describes Ramifications of Smoking
552 Stresses Role of MD in VD Control

FORUM 514, 516
STATE SOCIETY 521, 522, 525, 527
BREAKING NEWS 553, 554, 555, 556
VIEWPOINTS 557
MEDICARE 560, 561, 562
SOCIO-ECONOMICS 565, 566, 568
ANCILLARY ACTIVITIES 572, 574, 575, 576, 577, 578, 580
COUNTY SOCIETIES 582, 583
LEGAL OPINIONS 584
PUBLIC RELATIONS 586
PERSONAL MENTION 592

ALSO:

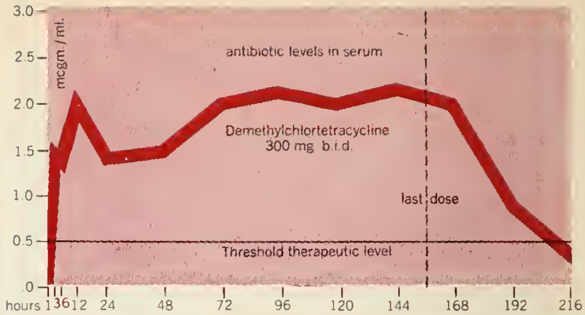
587 In Memoriam
590 From the Mailbag
596 Welcome, New Members

ublished monthly, except two extra issues to be published in October and December, by the Michigan State Medical Society its official journal at 2642 University Ave., Saint Paul, Minn. 55114. Second class postage paid at Saint Paul, Minnesota. rly subscription rate, $9.00; single copies, 80 cents. Additional postage: Canada, $1.00 per year; Pan-American Union. 50 per year; Foreign, $2.50 per year. Printed in USA. All communications relative to manuscripts, advertising, news, exnges, etc., should be addressed to Publication Committee, Michigan State Medical Society, 120 West Saginaw Street, East nsing, Michigan 48824. © 1966 Michigan State Medical Society.

greater potency

lower mg intake per day

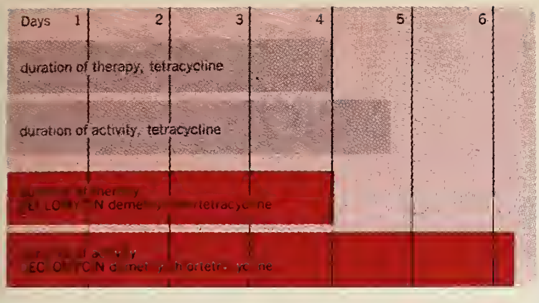
600 mg versus 1,000 mg



higher activity

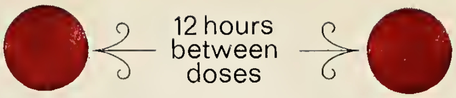
levels than ordinary tetracyclines

From Sweeney, W. M.; Dornbush, A. C., and Hardy, S. M.; Amer. J. Med. Sci. 243:296 (Mar.) 1962



1-2 days' "extra" activity

after the last dose to protect against relapse



one 300 mg Tablet
mid-morning

one 300 mg Tablet
mid-evening

It's made for b.i.d.

in G.U. infections

broad-spectrum performance above and beyond the activity of ordinary tetracyclines

DECLOMYCIN®

DEMETHYLCHLORTETRACYCLINE

Effective in a wide range of everyday infections—respiratory, urinary tract and others—in the young and aged—the acutely or chronically ill—when the offending organisms are tetracycline-sensitive.

Contraindication—History of hypersensitivity to demethylchlortetracycline.

Warning—In renal impairment, usual doses may lead to excessive systemic accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated and, if therapy is prolonged, serum level determinations may be advisable. A photodynamic reaction to natural or artificial sunlight has been observed. Small amounts of drug and short exposure may produce an exaggerated sunburn reaction which may range from erythema to severe skin manifestations. In a smaller proportion, photoallergic reactions have been reported. Patients should avoid direct exposure to sunlight and discontinue drug at the first evidence of discomfort.

Precautions and Side Effects—Overgrowth of nonsusceptible organisms may occur. Constant observation is essential. If new infections appear, appropriate measures should be taken. Use of demethylchlortetracycline during tooth development (last trimester of pregnancy, neonatal period and early childhood) may cause discoloration of the teeth (yellow-grey-brownish). This effect occurs mostly during long-term use but has also been observed in short treatment courses. In infants, increased intracranial pressure with bulging fontanels has been observed. All signs and symptoms have disappeared rapidly upon cessation of treatment. Side reactions include glossitis, stomatitis, proctitis, nausea, diarrhea, vaginitis and dermatitis. If adverse reaction or idiosyncrasy occurs, discontinue medication and institute appropriate therapy. Anaphylactoid reactions have been reported.

Average Adult Daily Dosage: 150 mg q.i.d. or 300 mg b.i.d. Should be given 1 hour before or 2 hours after meals, since absorption is impaired by the concomitant administration of high calcium content drugs, foods and some dairy products.

Capsules: 150 mg; *Tablets:* film coated, 300 mg, 150 mg, and 75 mg of demethylchlortetracycline HCl.

LEDERLE LABORATORIES, A Division of American Cyanamid Company, Pearl River, New York
656-6-3762

THE FORUM QUESTION THIS MONTH:

How can the number of non-emergent patients be reduced in hospital emergency rooms?

R. M. GOETHE, M.D.

Midland

Any attempt to reduce the number of non-emergent patients receiving care in hospital emergency rooms should, in part, begin with a consideration of reasons for such use. In every community there is a significant number of chronic offenders who use the emergency room as their only source of medical care. Their erroneous reasoning includes shorter waiting periods, lower costs, and "less pressure to pay."

Families with private physicians often utilize the emergency room for nonemergent problems because they are uninformed or misinformed. Statements such as 'We did not choose to bother our doctor on his day off," "We had no idea you could take care of these problems in the office," or "We did not wish to inconvenience you," are common.

Education of the public concerning the use of the emergency room is the answer and the task of both hospital and physician. We realize the community hospital has a certain obligation to provide outpatient medical care. Nevertheless, obvious nonemergent cases should be so labeled and clearly defined to the family or patient. Attitudes, abilities, tact, and cooperation of emergency room personnel are most important, and these people should be selected and assigned with great care.

The chronic offender group can probably be little persuaded, but repeatedly stressing the importance of private physician care concerning preventive medicine and continuity of medical care may help.

The hospital may help to educate the patients of private physicians by:

1. Requesting patient or family to phone physician before registering him if he has not already done so.
2. Displaying prominent sign stating the ER fee does not include the physician's fee.
3. Reminding patients of existing alternate call setups and telephone answering service.

Physicians may educate by:

1. Strongly urging and requesting phone call before proceeding to ER.
2. Instructing clearly concerning days-off, call system, and alternate coverage.
3. Being available.
4. Stressing the probable greater convenience to patient and physician, and less cost, in utilizing doctor in office or possible house call.

ROBERT C. PROPHATER, M.D.

Bay City

How can we reduce the number of non-emerge
patients receiving care in hospital emergency room
EASY—but I'm not sure that it would be wis
First, we must examine the cause of the non-emerge
patients being in the emergency room. The emerge
cy room is convenient for the doctor as well as havi
the best facilities available for diagnosis. The use
emergency rooms has taken the place of house ca
—and it is a great improvement. The solution is sir
ple—charge fees commensurate with the service giv
instead of good public relations for a NO CHARG
on meet and treat.

The system could be changed but I personal
would not want to see it done, nor would I so recor
mend.

CLAYTON K. STROUP, M.D.

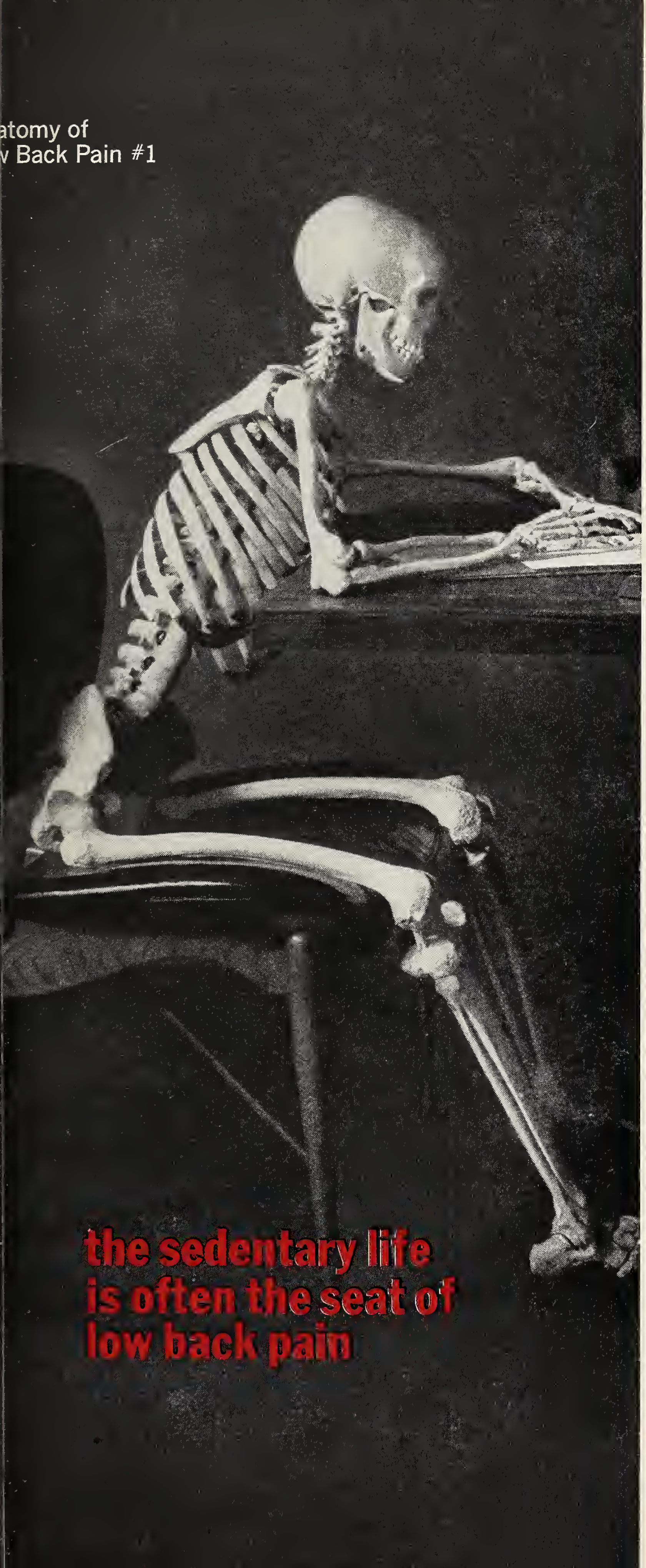
Flint

The approach to this problem depends entirely
who is hurting.

The insurance companies that have sold a covera
which the premium does not adequately cover; t
general practitioner who has seen some 75 patier
during the day and is not about to go back to t
office for one more at night; the internist who h
told his patient she can have an appointment
about three weeks; the otologist who has inform
the man with an earache that he has limited
practice to microsurgery; the roentgenologist who
taking vast numbers of negative x-rays because t
attendant is afraid of lawsuit; the pediatrician w
finds it easier to refer the baby with the croup to t
emergency room at 3:00 a.m.; the urologist wh

C. L. STROUP, M.D.
Flint

R. L. THIRLBY, M.D.
Traverse City



The human spine is not engineered for prolonged sitting at desks, pianos, typewriters and drafting boards. The stresses set up by the heavy, forward-tilted head and trunk, balanced precariously on an insufficient base, result in strain of the dorsal musculature, particularly at the low lumbar level.

The unusual muscle-relaxant and analgesic properties of 'Soma' make it especially useful in the treatment of low back sprains and strains. 'Soma' is widely prescribed ☐ **to relieve pain** ☐ **to relax muscles** ☐ **to restore mobility.**

Indications: 'Soma' is useful for management of muscle spasm, pain, and stiffness in a variety of inflammatory, traumatic, and degenerative musculoskeletal conditions. It also may act to normalize motor activity in certain neurologic disturbances.

Contraindications: Allergic or idiosyncratic reactions to carisoprodol.

Precautions: 'Soma', like other central nervous system depressants, should be used with caution in patients with known propensity for taking excessive quantities of drugs and in patients with known sensitivity to compounds of similar chemical structure, e.g., meprobamate.

Side Effects: The only side effect reported with any frequency is sleepiness, usually on higher than recommended doses. An occasional patient may not tolerate carisoprodol because of an individual reaction, such as a sensation of weakness. Other rarely observed reactions have included dizziness, ataxia, tremor, agitation, irritability, headache, increase in eosinophil count, flushing of face, and gastrointestinal symptoms.

One instance each of pancytopenia and leukopenia, occurring when carisoprodol was administered with other drugs, has been reported, as has an instance of fixed drug eruption with carisoprodol and subsequent cross reaction to meprobamate. Rare allergic reactions, usually mild, have included one case each of anaphylactoid reaction with mild shock and angioneurotic edema with respiratory difficulty, both reversed with appropriate therapy. In cases of allergic or hypersensitivity reactions, carisoprodol should be discontinued and appropriate therapy initiated. Suicidal attempts may produce coma and/or mild shock and respiratory depression.

Dosage: Usual adult dose is one 350 mg. tablet three times daily and at bedtime.

Supplied: Two Strengths: 350 mg. white tablets and 250 mg. orange, two-piece capsules.

Before prescribing, consult package circular.

for the relief of low back sprains and strains

SOMA®

(CARISOPRODOL)

Wallace Laboratories, Cranbury, N.J.
26S01J

patient with prostatic hypertrophy has taken an anti-histamine and cannot void at 3:00 a.m.; the hospital which has provided fine quarters and can no longer obtain a resident staff to man it, and finally, the patient who has found a place where he can go and get care and where it will be paid for by his insurance company.

I'm afraid the out-patient Emergency Service is here to stay and it is going to get worse, and I have no simple answer.

RICHARD L. THIRLBY, M.D.

Traverse City

This is a problem which can only be handled by the co-operative efforts of the hospital administration and the medical staff; the administration providing the nursing, clerical, and intern personnel, and the medical staff providing the medical staffing and directions. A firm policy of treating only emergent patients must be adopted and followed by all concerned.

A patient arriving in the emergency room will be screened by a clerk who will ask the patient if he considers his complaint an emergency; if so, he wil be seen; if not, he will be informed that only emergency cases are seen and the clerk will assist the patient to be seen by a physician in his own office.

The staff physician on call shall be available t assist the emergency room clerk to obtain medica service for the non-emergent patient.

D. D. FINLAYSON, M.D.

Sault Ste. Marie

I feel that I am responsible for some of the non emergency cases now seen in the hospital emergenc room.

My office schedule is full. I spend my mornin hours at the hospital, and many times say "Come t the hospital in the morning," rather than "Come t the office in the afternoon."

Morning office hours would be an answer, but th irregularity of my hours in surgery makes it difficul to be consistent in a morning schedule. I do a few cases myself—which could be controlled, but I als assist others, which is not easily controlled.

SAMMOND PLEASANT LODGE

Offers to the elderly and chronically ill

Peace and quiet. Freedom of a large and richly furnished home and acres of lawns and wooded rolling grounds, scientifically prepared tasty meals, congenial companionship. A real

"Home away from Home"

Member of Michigan and American Nursing Home Associations. Highly recommended by members of the Medical Profession who have had patients at the Lodge.

For further information write to:

SAMMOND PLEASANT LODGE

124 West Gates Street
Romeo, Michigan
Plateau 2-2591

For Your Library

Copies of "A Century of Service in Medicine," published as a Centennial highlight by MSMS, are still available for cost, $2.00. The book, bound handsomely in blue, was written by Wm. J. Stapleton, Jr., M.D., of Detroit, the MSMS Historian. To obtain a copy, write to MSMS, 120 West Saginaw, East Lansing, and enclose a check.

ISMS Men Help o Lead AMA

More and more MSMS members are being apinted to AMA committees and to important posts th the AMA scientific sections and specialty jourls.

Wm. A. Hyland, M.D., Grand Rapids, Chairman the MSMS Delegation to the AMA, reports the lowing MSMS members as leaders among the rious AMA activities at the present time:

AMA COUNCILS AND COMMITTEES

Harold F. Falls, M.D., Ann Arbor, Study Comttee on Ophthalmology of the Commission to Codinate the Relationships of Medicine with Allied ealth Professions and Services;

Maurice H. Seevers, M.D., Ann Arbor, Chairman, mmittee for Research on Tobacco and Health MA-ERF); and Committee on Alcoholism and ldiction;

Richard C. Schneider, M.D., Ann Arbor, Comttee on Medical Aspects of Sports; and Subcomttee on Classification of Sports Injuries;

William H. Beierwaltes, M.D., Ann Arbor, Comttee on Nuclear Medicine;

Arthur J. Vorwald, M.D., Detroit, Committee on ting of Mental and Physical Impairment;

Charles G. Child, III, M.D., Ann Arbor, Comttee on Nursing;

Wm. A. Hyland, M.D., Grand Rapids, Chairman, uncil on Constitution and Bylaws;

Wm. D. Robinson, M.D., Ann Arbor, Council on ods and Nutrition; and Residency Review Comttee in Internal Medicine;

James A. Ferguson, M.D., Grand Rapids, Resincy Review Committee for Colon and Rectal rgery;

Clarence S. Livingood, M.D., Detroit, Residency view Committee for Dermatology;

Muir Clapper, M.D., Detroit, Residency Review mmittee for Internal Medicine;

John W. Henderson, M.D., Ann Arbor, Residency view Committee for Ophthalmology;

Walter P. Work, M.D., Ann Arbor, Residency Reew Committee for Otolaryngology;

A. E. Heustis, M.D., Lansing, Residency Review mmittee for Preventive Medicine;

Richard J. Bing, M.D., Birmingham, Committee r Research on Tobacco and Health (AMA-ERF);

H. J. Magnuson, M.D., Ann Arbor, Residency Reew Committee for Preventive Medicine;

Russell N. DeJong, M.D., Ann Arbor, Residency eview Committee for Psychiatry and Neurology;

Jacques S. Gottlieb, M.D., Detroit, Residency Reew Committee for Psychiatry and Neurology;

George W. Slagle, M.D., Battle Creek, Council on Medical Service; Vice-Chairman, Committee on Insurance and Prepayment Plans; Council on Medical Service Appointees as Liaison Representative; Liaison Committee of Council on Medical Education and Council on Medical Service;

Frederick C. Swartz, M.D., Chairman, Lansing, Committee on Aging;

Arthur A. Humphrey, M.D., Battle Creek, Committee on Insurance and Prepayment Plans;

Herbert A. Raskin, M.D., Detroit, Committee on Alcoholism and Addiction;

Franklin V. Wade, M.D., Flint, Committee on Fractures;

Leonard E. Himler, M.D., Ann Arbor, Committee on Mental Health in Industry;

AMA SCIENTIFIC SECTIONS

John M. Sheldon, M.D., Ann Arbor, Delegate, Section on Allergy;

Arthur E. Schiller, M.D., Detroit, Vice-Chairman, Section on Dermatology;

E. Richard Harrell, Jr., M.D., Ann Arbor, Assistant Secretary, Section on Dermatology;

Clarence S. Livingood, M.D., Detroit, Delegate, Section on Dermatology;

H. Marvin Pollard, M.D., Ann Arbor, Alternate Delegate, Section on Gastroenterology;

Muir Clapper, M.D., Detroit, Chairman, Section on Internal Medicine;

Harold F. Falls, M.D., Ann Arbor, Delegate, Section on Ophthalmology;

Edgar E. Martmer, M.D., Harper Woods, Delegate, Section on Pediatrics;

George H. Koepke, M.D., Ann Arbor, Assistant Secretary, Section on Physical Medicine;

Harold J. Magnuson, M.D., Ann Arbor, Chairman, Section on Preventive Medicine;

Norman D. Nigro, M.D., Detroit, Secretary, Section on Proctology;

Kenneth L. Krabbenhoft, M.D., Detroit, Assistant Secretary; Section on Radiology;

SPECIALTY JOURNALS—EDITORIAL BOARDS

Clarence S. Livingood, M.D., Detroit, Archives of Dermatology;

Bertram D. Dinman, M.D., Ann Arbor, Archives of Environmental Health;

Bruce Proctor, M.D., Royal Oak, Associate Editor of Otolaryngology;

Samuel P. Hicks, M.D., Ann Arbor, Archives of Pathology.

MSMS Testimony Features Deans At Hearing on D.O. College

(See June 24 Medigram for voting details.)

Testimony by six deans of medicine—including the three from Michigan—highlighted the presentation by the Michigan State Medical Society before the House of Representatives Ways and Means Committee May 18 in Lansing on the question of a proposed osteopathic college authority.

Also testifying for MSMS was President-Elect C. Allen Payne, M.D., Grand Rapids, and Vincent Carroll, M.D.

The chamber room was filled, with far more M.D.'s than osteopaths. The hearing began at 8 p.m. and concluded about midnight after the Legislators listened to the presentations by both MSMS and the osteopathic organization.

Headlines the following day gave these accounts:

Detroit News:
Diagnoses Clash At House Clinic on Osteopathic College

Lansing State Journal:
Osteopath Opponents Want Existing Schools Expanded

Booth Newspapers:
Proposed Michigan Osteopathic School Runs Into Criticism

* * *

The main theme of the MSMS presentations was that the osteopathic college proposal was not wise and not a good investment because it would not be connected with a major university and because it would not measure up to the caliber of existing state medical schools. Another approach was that funds spent on the three existing medical schools would produce better doctors faster.

* * *

Following is the closing, summarizing statement by MSMS President-Elect Payne:

"The Michigan State Medical Society wishes to go on the record before this committee, and the people of Michigan, as supporting an orderly arrangement to expand facilities for higher education in this state so as to give the highest possible quality of training to the greatest possible number of student physicians and ancillary members of the medical family—to do so in the shortest possible time—and, in terms of value received, to accomplish this at the most reasonable cost to the taxpayers of Michigan.

"We submit our opinion that the composit testimony presented to you by Deans Bostick, Egan, Gardner, Hubbard, Hunt and Tupper has produced incontrovertable evidence that this can best be accomplished by full legislative support of the curren plans for expansion of Michigan's present grea medical schools and Michigan State University.

"We therefore urge that you reject Senate Bil Number 272, and not embark upon a course whic will surely require you to face up, at a future date to whether or not the taxpayers' money will be spen to maintain and operate a college which, not bein affiliated with the rich academic resources of a major university, cannot expect to measure up to th caliber of the Michigan medical schools in whic we all take such pardonable pride.

"Our testimony may have included some point to which those favoring Senate Bill Number 27 may respond. We assure you that we know tha you do not intend to hear a debate. However, w hope that we, in turn, will be afforded an opportunity to give you our views should they raise point which require rebuttal.

"We sincerely thank you for this opportunity t speak on behalf of our State's more than 10 thousand doctors of medicine. We are here at your disposal, to answer any question which you may car to put to us."

* * *

Following are excerpts from the several MSMS presentations:

Ernest Gardner, M.D., dean of the school of medicine at WSU, criticized plans by osteopaths to accept their first class of 64 students in 1970.

Doctor Gardner said expansion plans at Wayne MSU and UM will permit the three schools t add 149 more medical students a year by 1969.

"It must be emphasized that this developmen and expansion will culminate years of planning,' he said. "It is almost impossible to open the door of a new medical school in less than 10 years afte planning begins."

"There is no way in which we can justify a cheaper a philosophy of medical education whic contributes nothing to prevention and which thereby rests on its pragmatic treatment of illness," sai Doctor Gardner.

"The state cannot afford to support a college o medicine outside the framework of a university because no broad health educational program is possible without strong university support."

"The education of physicians is a function o higher education and is optimally carried out within a university setting," commented William Hub-

ost of my patients with
gh blood pressure are
s old as I am. A lot of them
e living on pensions.
ney're grateful when I can
eep prescription costs
own.

egroton®
orthalidone 50 mg. reserpine 0.25 mg.

ablet daily
ings pressure down

antage: Both components of Regroton
long-acting.
rage dosage: One tablet daily with
akfast.
ntraindications: History of mental
ression, hypersensitivity, and most
es of severe renal or hepatic diseases.
rning: Discontinue 2 weeks before
eral anesthesia, 1 week before electro-
ck therapy, and if depression or
tic ulcer occurs. With administration
nteric-coated potassium supplements,
possibility of small bowel lesions
uld be kept in mind.
cautions: Reduce dosage of con-
nitant antihypertensive agents by one-
. Discontinue if the BUN rises or
r dysfunction is aggravated. Electro-
imbalance and potassium depletion
y occur; take particular care in
hosis or severe ischemic heart disease,
l in patients receiving corticosteroids,
TH, or digitalis. Salt restriction is not
ommended. Use with caution in
ients with ulcerative colitis, gall-
nes, or bronchial asthma.
e effects: Nausea, vomiting, diarrhea,
scle cramps, headaches and dizziness.
ential side effects include angina pecto-
anxiety, depression, drowsiness,
erglycemia, hyperuricemia, lassitude,
kopenia, nasal stuffiness, nightmare,
pura, urticaria, and weakness.
full details, see the complete prescrib-
information.
ailability: Bottles of 100 and 1000 tablets.

eigy

bard, Jr., M.D., dean of the UM medical school.

"A school which does not provide full access to university disciplines creates a deprived environment for the education of those who will care for the people in coming decades," Doctor Hubbard said.

Andrew D. Hunt, M.D., dean of the College of Human Medicine at MSU, stated there was no question but that more physicians and other health professionals were needed.

But, he added, the need should be met by development of a full medical program at MSU and development of the resources of other universities rather than on establishment of completely new schools.

* * *

Charles J. Tupper, M.D., dean of the University of California's medical school at Davis, Calif., added that an osteopathic school would be a duplication of existing facilities in Michigan. He said, "a new (osteopathic) school will perpetuate the needless, even senseless duplication of facilities that now exist and are growing."

Richard L. Egan, M.D., of Creighton University in Omaha, said that the five present osteopathic colleges in the nation suffered "crippling handicaps" because of lack of "quantity and quality of space, library facilities, clinical facilities, faculty and operating funds." He discussed his visits to the five D.O. schools.

Warren Bostick, M.D., dean of the University of California Medical School at Los Angeles, told the committee, "I'm now certain merger is inevitable (nationwide), so why not take the right step at this moment."

The D.O. testimony included a Michigan minister, a medical supplier from Kansas City, and the president and executive director of their state organization.

Rep. Einar Erlandsen, (D-Escanaba) Chairman of the Ways and Means Committee, conducted the hearing. The members of the Committee directed many questions at the experts as they probed the issues.

MSMS Desk Cards Helpful

Earlier this year the MSMS Maternal Health Committee conducted a survey of 2,000 members to ask if they read the Maternal Health Desk Reference Cards.

There were 822 questionnaires returned, with 735 answering "yes" that they read the cards and 66 replying "no."

A total of 692 answered that the cards were of value to them in their practice, and 66 said they were of no value.

MEDISCENE

July 16-17—Upper Peninsula Seminar for Michiga State Medical Assistants, Sault Ste. Marie

July 28-29—Coller-Penberthy-Thirlby Medical Con ference, Traverse City, Park Place Motor Inn

Sept. 12-16—Michigan Nurses Association, Confer ence for Operating Room Nurses, Kellogg Center East Lansing

Sept. 25-27—Michigan State Medical Society Hous of Delegates, Pantlind Hotel, Grand Rapids

Sept. 27-29—Michigan State Medical Society Woman's Auxiliary, Pantlind Hotel, Grand Rapids

Sept. 27-30—Michigan State Medical Society Annual Scientific Session, Civic Center, Grand Rapid

Sept. 28-29—Michigan State Medical Assistants Society Convention, Mr. President Motel, Gran Rapids

Oct. 11-14—Annual Convention, Michigan Nurse Association, Jack Tar Hotel and Civic Center Lansing

Oct. 16-22—Community Health Week

Oct. 18-19—Annual Convention, American Cance Society, Michigan Division, Civic Center, Lansin

Oct. 19-20—Annual Meeting, Michigan Tuberculosis and Respiratory Disease Association, Kellog Center, East Lansing

Oct. 20—Annual Meeting, Michigan Thoracic Society, Kellogg Center, East Lansing

Oct. 24-26—School Nursing Workshop, Boyn Mountain Lodge, Boyne Falls

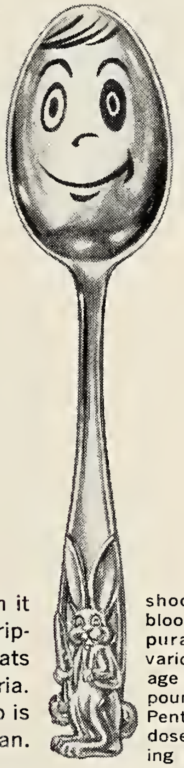
Oct. 27-29—Annual Convention, Michigan Societ for Crippled Children and Adults, Inc., Harri Motor Inn, Kalamazoo

Fayne Oberst, D.V.M., left, in white coat, conduct a tour of Michigan State University's new $4.7 millio Veterinary Clinic for conferees attending the Conference on Medical News Writing. The new clinic contains extensive facilities for animal medical an surgical research such as the electronics instrumentation laboratory shown above. Doctor Oberst is director of veterinary clinics.

PENTID®-SULFAS FOR SYRUP

SQUIBB BUFFERED PENICILLIN POWDER WITH SULFADIAZINE, SULFAMETHAZINE, AND SULFAMERAZINE

the fruit punch that packs a wallop



Pentid-Sulfas for Syrup is a real knock-out when it comes to good taste. And, with a single prescription, you provide an anti-infective that combats both gram-positive and gram-negative bacteria. Notable for its economy, Pentid-Sulfas for Syrup is everybody's choice, patient, parent and physician.

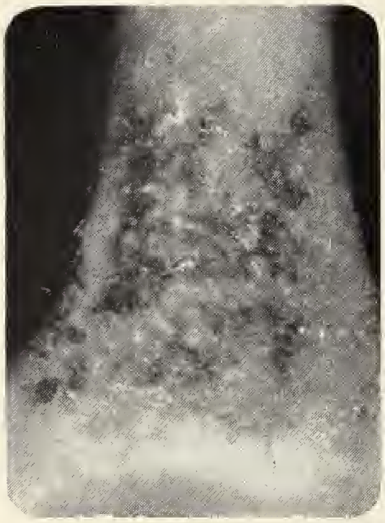
Contraindications: Contraindicated in patients sensitive to sulfa or penicillin, pregnant females at term, premature infants, newborns during first week of life. **Precautions:** Watch for hypersensitivity reactions and overgrowth of nonsusceptible organisms. Observe usual precautions for sulfonamide therapy: adequate fluid intake; force fluids if urine volume is low; maintain urinary pH of 7 or higher; use only after critical appraisal in patients with liver or renal damage, urinary obstruction, blood dyscrasias. **Adverse Reactions:** Anaphylactoid shock (rare), G.I. disturbances, hepatitis, pancreatitis, blood dyscrasias, neuropathy, drug fever, urticaria, purpura, hematuria, crystalluria, conjunctival and scleral varicula, petechiae may occur. **Dosage:** Daily pediatric dosage should supply 65-100 mg. trisulfapyrimidines per pound body weight in divided doses q. 4 to 6 h. **Supply:** Pentid-Sulfas for Syrup when prepared, provides 80 cc. (16 doses) or 150 cc. (30 doses) of fruit-flavored syrup providing in each 5 cc. teaspoonful 125 mg. (200,000 u.) potassium penicillin G and 167 mg. each of sulfadiazine, sulfamethazine, and sulfamerazine.

Now . . . **NEW PENTID® '400'—SULFAS FOR SYRUP** (buffered penicillin powder with sulfadiazine, sulfamethazine, and sulfamerazine each 5 cc. providing 250 mg. [400,000 units] potassium penicillin G and 167 mg. each of sulfadiazine, sulfamethazine, and sulfamerazine). Available in 16-dose (80 cc.) and 30-dose (150 cc.) bottles.

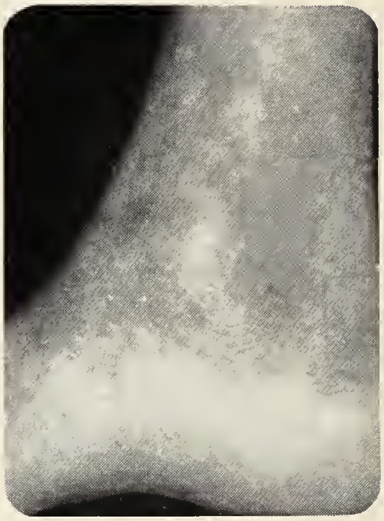
For full information, see Product Brief.

SQUIBB Squibb Quality—the Priceless Ingredient

eczema: scourge of childhoo



R. R., Age 11—Before treatment—
atopic eczema of long standing



After treatment—with ARISTOCORT
Topical Ointment 0.1% for two weeks

ARISTOCORT® Triamcinolone Acetonide Topicals have proved exceptionally effective in the control of various forms of childhood eczema: allergic, atopic, nummular, psoriatic, and mycotic.

In most cases responsive to topical ARISTOCORT, the 0.1% concentration is sufficiently potent. The 0.5% concentration provides enhanced topical activity for patients requiring additional potency for proper relief.

Administration and Dosage: Apply sparingly to the affected area 3 or 4 times daily. Some cases of psoriasis may be more effectively treated if the 0.1% Cream or Ointment is applied under an occlusive dressing.

Contraindications: Tuberculosis of the skin, herpes simplex, chicken pox and vaccinia.

Precautions and Side Effects: Do not use in the eyes or in the ear (if drum is perforated). A few individuals react unfavorably under certain conditions. If side effects are encountered, the drug should be discontinued and appropriate measures taken. Use on infected areas should be atte
with caution and observation, bearing in mind the pot
spreading of infection and the advisability of disconti
therapy and/or initiating antibacterial measures. Genera
dermatological conditions may require systemic cortic
oid therapy. Steroid therapy, although responsible for r
sions of dermatoses, especially of allergic origin cannot b
pected to prevent recurrence. The use over extensive
areas, with or without occlusive nonpermeable dres
may result in systemic absorption. Appropriate precau
should be taken. When occlusive nonpermeable dre
are used, miliaria, folliculitis and pyodermas will some
develop. Localized atrophy and striae have been rep
with the use of steroids by the occlusive technique.
occlusive nonpermeable dressings are used, the phy
should be aware of the hazards of suffocation and fla
bility. The safety of use on pregnant patients has not
firmly established. Thus, do not use in large amounts
long periods of time on pregnant patients.

Packages: Tubes of 5 Gm. and 15 Gm.; ½ lb. jar.

PHOTOGRAPHS COURTESY OF M. M. NIERM

Aristocort® Topical Ointment 0.1% and Cream 0.1%, 0.
Triamcinolone Acetonide
Also available in foam form and with neom

Lederle LEDERLE LABORATORIES, A Division of American Cyanamid Company, Pearl River, New

Abstract of MSMS Council Action

Meeting of May 18, 1966

IS CANDIDATE FOR AMA BOARD OF TRUSTEES

A progress report on the Michigan Delegation campaign to elect Michigan's George W. Slagle, M.D., as ee of the AMA was received with enthusiasm.

IGNATION OF MSMS SECRETARY

With regret, The Council accepted the resignation of D. Bruce Wiley, M.D., as MSMS Secretary. Doctor y is retiring from practice to accept a position with the Michigan Department of Public Health.

HIGAN MEDICAL SERVICE REPORT

This report covered Implementation of Medicare Title XVIII and Title XIX, Medicare complementary cov- e, new Blue Shield board members and radiologist billings.

ICARE NEGOTIATIONS

The Social Security Administration had not yet scheduled a date for the meeting with Michigan representa- to discuss the payment mechanism for physician services under Part B of Medicare.

OTIATION WITH OFFICE FOR DEPENDENTS MEDICAL CARE

The Council requested the Committee on Governmental Medical Care Programs to meet with officers of epartment of the Army to discuss a revised fee schedule for the Dependents Medical Care program.

FESSIONAL LIABILITY INSURANCE

Staff was requested to prepare an informational paper on the status of professional liability claims in igan, for distribution to each component society and to The Council.

EREAL DISEASE EDUCATION CAMPAIGN

The Council authorized implementation of a venereal disease education campaign developed by the ic Health Committee. The MSMS Public Relations Committee will coordinate the program.

---

llustration IN TEACHING AND RESE
FREE MATERIALS

Here are two more photos from the 1966 Officers Conference in Detroit. In the upper photo, two members visit with MSMS President Luther R. Leader, M.D. Left to right are Claude L. Weston, M.D., Owosso, and J. L. Leach, M.D., Flint.

In the lower photo, the display of free materials holds the attention of, (left to right), George E. R. Anthony, M.D., Flint; G. T. Kellerher, M.D., Battle Creek, and Councilor Harvey C. Hansen, M.D., also of Battle Creek.

MSMS Offers Better Disability Coverage

The Michigan State Medical Society is offering an improvement in the membership Group Disability Insurance Plan. The master policy is being amended to provide a conversion privilege to each practicing insured member under 65 years of age. Conversion from the group coverage to an individual guaranteed renewable policy may be made if for some reason the master policy should be discontinued by MSMS or Provident Life and Accident Insurance Company or in the event the Insured should leave Michigan.

The conversion policy will provide the same coverage as the master policy and will be guaranteed renewable to age 70. This gives the insured a real equity in the renewal of his insurance.

good reason
to select
Ilosone®
Erythromycin Estolate
for bacterial
infections

94
6
8↑
100
2
4
6
8

two to four times
the therapeutic
activity of other
erythromycins

CONTRAINDICATIONS: Ilosone is contraindicated in patients with a known history of sensitivity to this drug and in those with preexisting liver disease or dysfunction.

SIDE-EFFECTS: Even though Ilosone is the most active oral form of erythromycin, the incidence of side-effects is low. Infrequent cases of drug idiosyncrasy, manifested by a form of intrahepatic cholestatic jaundice, have been reported. There have been no known fatal or definite residual effects. Gastro-intestinal disturbances not associated with hepatic effects are observed in a small proportion of patients as a result of a local stimulating action of Ilosone on the alimentary tract. Although allergic manifestations are uncommon with the use of erythromycin, there have been occasional reports of urticaria, skin eruptions, and, on rare occasions, anaphylaxis.

DOSAGE: *Children under 25 pounds*—5 mg. per pound of body weight every six hours. *Children 25 to 50 pounds*—125 mg. every six hours. *Adults and children over 50 pounds*—250 mg. every six hours. For severe infections, these dosages may be doubled.

Available in Pulvules®, suspension, drops, and chewable tablets. Ilosone Chewable tablets should be chewed or crushed and swallowed with water.

Additional information available to physicians upon request.
Eli Lilly and Company, Indianapolis, Indiana 46206.

Lilly

600541

Educating Tomorrow's Physicians

ORIGINAL SCIENTIFIC ARTICLE

lorton Levitt, Ph.D.
lon H. Scott, Ph.D.
st D. Gardner, M.D.
f Detroit

r the past 50 years, medical education in this try has been in an almost constant state of re- uation in the areas of instructional content and e of presentation. This reassessment has been ulated by various contemporary factors, compris- vhat has been called the "climate of change" day's complexities of geography, philosophy, edu- nal goals and public pressures for medical care. the Wayne State University School of Medi- a program of reorganization within the tradi- l sequence is in its seventh year as an explora- of one possible way to offer a medical education humanizing overtones.

Known as the 2-4-2 Program, it began in 59 as an experiment to keep the medical ident in intimate contact with the intellectual rment of the arts and humanities.

ne 2-4-2 Program occupies eight years. The first are exclusively in the arts college, the curriculum g designed to satisfy in large part the premedical irements. The next four years combine upper ion liberal arts courses and the basic medical ice courses; these permit the student to take a elor's degree in the College of Liberal Arts six s after entering the University.

ourse sequences are arranged so that after earn- the baccalaureate degree, the student can elect e a candidate for the M.S. or the Ph.D. degree. se electing the M.D. degree conclude the 2-4-2 ram in the two clinical years of medical school.

* * *

HE FOLLOWING convictions held by the ol of Medicine administration and faculty pro- d the rationale for the 2-4-2 curriculum.

First, it was hoped to eliminate wholly or largely the mental trauma suffered by too many medical students in the sharp transition from the arts college preparatory work to the rigidly prescribed program of the medical school. This intellectual hurdle exists because of the increasingly large amount of work compressed into the first two preclinical years and the high level of performance required.

Secondly, the traditional medical program has been quite strictly specified in patterns which have remained more or less unchanged in the face of striking alterations in the direction of medical progress. In the past, emphasis in training has been on the biologic disciplines; currently there is a tendency to emphasize chemistry, physics and mathematics.

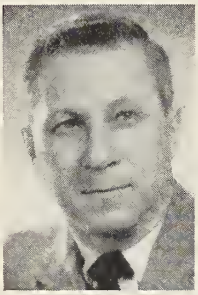
The Program meets this need for the adjustment of the medical curriculum to coordinate with the present dependence of clinical medicine upon the physical sciences.

Finally, it was the hope of the medical faculty that such a plan would help produce physicians who would be able to fit their services to the physical body into a broader picture of the social and spiritual needs of man. It is our wish that the 2-4-2 Program keep alive the student's interest in the fundamentals of the arts and sciences while he is building the foundation for his profession. We feel that with this cultural foundation he would avoid the narrow professionalism which the public so often associates with the stereotype of the physician.

* * *

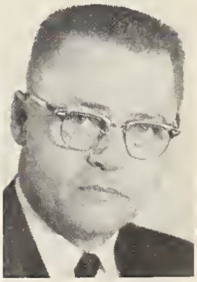
THE 2-4-2 PROGRAM did not originate at Wayne. In May, 1956, *The Journal of Medical Education* published a paper by Professor Arnold B. Grob-

AUTHORS



M. Levitt, Ph.D.

G. H. Scott, Ph.D.



E. D. Gardner, M.D.

---

orton Levitt, Ph.D., Associate Dean, School of icine, Wayne State University; Gordon H. Scott,)., Vice President for Medical School Develop- t, Wayne State University; Ernest D. Gardner,)., Dean, School of Medicine, Wayne State Uni- ty.

man of the University of Florida entitled "Medical Education in a University Setting." The proposed changes in the presentation of the first two years of medicine were unique in medical education in the United States. They were carefully reasoned and seemed to hold much promise.

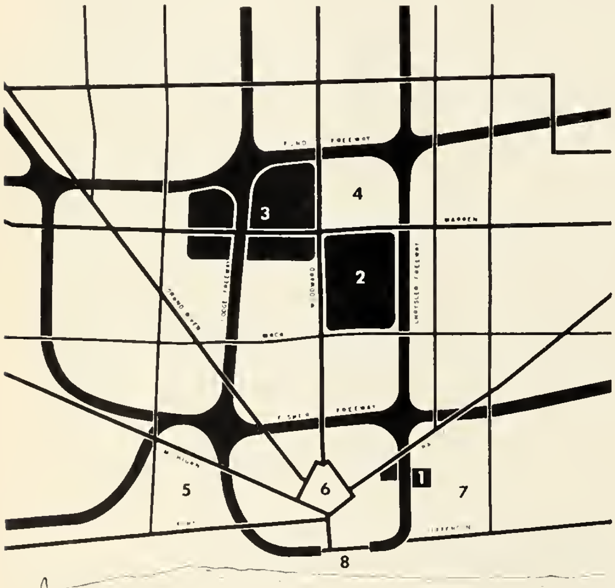
OBJECTIVES

The curriculum for the 2-4-2 Program was set down after three years of intensive study by a committee formed from the School of Medicine and College of Liberal Arts faculties. Guidelines were set with an eye on these objectives.

1. The curriculum of the first two years was to be basically the same for each student. It was to be the background or core curriculum for medical school courses from which the student could expand into liberal arts interests.

2. The curriculum of the middle four years was to be the same for each student so far as medical school courses were concerned, but it was to be flexible with regard to liberal arts courses, allowing the student to elect a major of his choice. The med courses were to be the currently accepted med school offerings. Therefore, the curriculum wc have to be designed so that medical school cla were equally available to 2-4-2 students and to "classical" medical students.

3. The program was to be such that at the of the middle four years (six years from the be ning of the course), a bachelor's degree would earned. From this point, the student could elect be a candidate for the M.D. degree or could e Graduate School as a candidate for the M.S. or Pl degree. For those electing the M.D. degree, the c cluding time spent in the 2-4-2 Program would be clinical years of medical school.



The Detroit Medical Center lies at the crossroads of the entire metropolitan area. The map shows the locale of the center in relation to the major projects. 1. Present downtown campus of the Wayne State University School of Medicine (including area designated opposite the numeral one.) 2. Detroit Medical Center. 3. Wayne State University main campus. 4. Cultural Center. 5. West Side Industrial District. 6. Central Business District. 7. Lafayette Park. 8. Civic Center.

FLEXIBILITY PERMITTED

The 2-4-2 Program is one in which the stud of ability can have a choice of careers, make c siderable commitments in time to one or more them, and withdraw if they prove inadequate to needs. This kind of flexibility is impossible when student follows the traditional pattern of four year college and gains admission to medical school only discover that the vast load of science in the first years is too great or that much of it is uninterest and therefore difficult.

* * *

THERE IS A seeming contradiction which lie the foregoing statements which endow the 2-4-2 F gram with the possibility of change of decision the student, while at the same time admitting provisionally to medical school at the end of his year in liberal arts.

> *Nevertheless, it is believed that the 2-4- Program allows the student to determine his rea interest in medicine while still a candidate fo the arts degree. He may progress steadily towar any one of several degrees without loss of tim or retracing of path.*

It is possible for the research degree to be ear at the end of seven years.

If the candidate elects to go for the M.D. deg the time required is the same as that for the conv tional program. The addition of one year to the quired eight, if the thesis research can be develop results in the combined doctoral degrees.

Perhaps the most compelling reason for the 2- Program is derived from the consequence of the co pression of six major disciplines into the two b science years of medicine. Medical educators h come to expect the student to have not only a g understanding of the principles but also a rat complete grasp of the details of these diverg scientific disciplines, each of which is essential.

This element of calendar time was considered the Curriculum Committee to be of utmost portance in the educational process. The feature

2-4-2 Program calling for the spreading of the
asic sciences over four years, interlarding them
areas of balance in the humanities, is perhaps
ost significant contribution. This time and mix-
allows for thinking and fitting the scientific ac-
olishments of mankind into cultural and be-
oral patterns.

MAJORS DIVERSIFIED

the outset there was a heavy scientific emphasis
e first two years of the original sequence arrange-
t in the 2-4-2 Program. This tended to create a
p of medical students who had a single kind of
emic training and whose focus was such that all
likely to emerge with majors in chemistry or
gy. When this problem was recognized, the sci-
ic prerequisites were lightened by creating a
ber of course majors and allowing the students
ollow the traditional course outlines of the in-
lual liberal arts departments. The chemistry re-
ement, which appeared heavy, was reduced and
ar of college mathematics was made optional.

* * *

HIS HAD THE desired effect; an analysis of the
ergraduate majors of the earliest classes indicates
while the students in the original group came
ost entirely from the sciences, the more recent
ps are composed of students with diversified
grounds.

ientific majors include chemistry, physics or bi-
y, but nearly half the students earn undergradu-
degrees in nonscientific areas, primarily English
psychology. Other study areas chosen are mathe-
ics, sociology and history. This stands in marked
rast to the usual premedical concentrations found
oday's traditional medical student groups.

REVIEW OF APPLICATIONS

ll applications for the 2-4-2 Program are re-
ved by a Conjoint Committee consisting of three
nbers of the College of Liberal Arts (which must
e its own confirming admission decision) and
e members of the School of Medicine faculty.

ll applicants are encouraged to apply for medi-
school admission at the end of the first year of
ege. Manifestly superior students are offered a
e in the school one year from that time. Others
deferred until the next spring.

hose clearly undesirable at the end of the first col-
year are rejected but advised to consider the
e traditional method of medical school entrance
e three years later.

*Actually, about one-half of the students in the
rogram are selected at the end of the first year
college and the remainder in the spring of the
econd year.*

he number within the program has varied, and the arbitrary decision to set aside about 20 to 25 places per year in a class of 125 has been reasonably correct. Within the School itself, no effort is made to keep the groups separate. They are deliberately mixed in classes; however, 2-4-2 students are isolated in their own preceptor groups.

* * *

THESE GROUPS meet weekly with a member of the faculty in a discussion course based on "science in the cultural mainstream." The sessions provide a relatively close supervisory relationship with these students. The identification inherent in the group activities serves as a cohesive force in what is, in other regards, a rather loosely structured and complex educational experience.

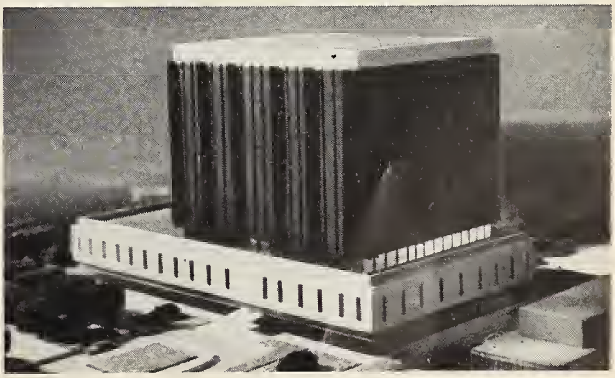
ADVANTAGES

Advantages of the plan are threefold.

First and foremost, students and faculty are exposed to the concept of "one university." The presence on the Conjoint Committee of mathematicians, political scientists, psychologists, chemists, microbiologists, internists, pediatricians, biologists, and linguists has led to much self-education, as well as to unusual sources of student recruiting. Often heard from committee members are comments about "a good student for the program because he is well rounded."

Second, although it was evident that there was some tendency to stress medical school subjects, the presence of liberal arts faculty on the Conjoint Committee, which evaluates student performance, insures that liberal arts subjects are treated on a parity with medical courses. Student failures in liberal arts courses have been regarded by the committee with as much

Ground will be broken in 1967 for the new Basic Science Building of the Wayne State University School of Medicine. Completion is planned for 1969 or 1970 when an entering class of 200 medical students is anticipated. The $22.5 million structure will house the departments of anatomy, physiology, pharmacology, biochemistry, microbiology, and pathology, as well as administrative offices and service facilities. Architects are Giffels & Rosetti, Inc., Detroit, and John Williams Associates, Cleveland.



severity as academic difficulty in anatomy or physiology.

* * *

FINALLY, THERE IS strong evidence of a continuing interest in academic careers among students in the plan. Eight of the ten in the first group had expressed an interest in Ph.D. training. Three in the second group completed B.S. degrees in their third year and are now doing master's work in anthropology, mathematics, and psychology.

Moreover, the group's intellectual incentive reveals itself in the students' unusual struggle to gain admittance to advanced courses. The School of Medicine has interceded with liberal arts departments on a number of occasions when the subject matter appeared to be too elementary for students in the group. It is interesting to note that these courses were in the areas of mathematics and physics.

STUDENT PERFORMANCE

In general, student performance has been very good, reaching its peak in anatomy and biological chemistry. It seems to diminish somewhat in the second basic science year, although the "honors—satisfactory—unsatisfactory" marking system in use does not allow for very clear distinctions. It should be noted, however, that 2-4-2 students have achieved a very high proportion of honors in the first clinical year completed in the program.

Wayne State University's $4 million Medical Research Building, dedicated last year, was the first new structure to be completed in the vast Detroit Medical Center. Projects underway include studies of growth and disease before birth, disorders of the ear, infectious diseases, arthritis and rheumatic disorders, cancer, skin disorders, and stroke.

A student group studies at Detroit General H pital (formerly Receiving), one of 16 instituti affiliated with the WSU School of Medicine.

Reactions are varied, both within and without the program. Those who stay in the program speak of relaxation, lack of tension, opportunity to go to concerts, and the like. The few who leave are impatient or "really interested only in science," or they surrender to economic pressure by parents. Other students in the medical school are often somewhat hostile toward the 2-4-2 group, complaining that t seem to have an easier life.

> *There is a marked impression that student attracted via the 2-4-2 Program are an intellectu ally superior group. It can be argued that a hig honor point average (between 3.3 and 3.4 achieved over one or two years of undergraduat school bears a certain relationship to "sprin hitters" in baseball.*

However, it is an indisputable fact that the 2- students tested in the 89th percentile nationally science and in the 72nd percentile in mathematics the Medical College Admission Test. No spe case is made for this matter save to point out t this performance occurred in the spring of t sophomore year in college and is, in general, hig than is found with the regularly accepted group.

It is not possible to present any charts, grap questionnaires, or lists of standard deviations t give tentative conclusions an aura of certainty. appears that the 2-4-2 Program may be a m efficient way to approaching the increasing scope modern medical education, and that the juxtaposit of the two main areas of scholarly effort may lead medical student to a more gradual and theref more enduring realization of his place in the c tural mainstream.

* * *

SUCCESS MEASUREMENT for such a progr is an immense problem because the term "succe must be defined, and it must be defined in terms objectives. Furthermore, the success of the progr must be compared with the success of the classi medical school program, a most difficult task for a medical school.

Objectives of Wayne's classical program are m tiple and subject to change. The classical progr attempts to turn out not "trained" physicians educated and educable physicians. Although there special interest in whether the 2-4-2 students will identifiable as physicians, aspirations for the 2- Program include similar aims.

This study is concerned with 32 patients who had been suffering ɒm cervical spondylosis with intractable pain and/or neurological ability, and who had not responded to a full course of conserva- e therapy. The surgical technique by the posterior approach and e extradural and intradural pathological findings are described. is diagnosis and the technique of surgical treatment are from e Department of Surgery, Section of Neurosurgery at St. Joseph spital, Ann Arbor.

ORIGINAL SCIENTIFIC ARTICLE

ervical Spondylosis Vith Neurologic Deficit

E. Latunde Odeku, M.D.
Ibadan, Nigeria
hard C. Schneider, M.D.
Ann Arbor

Satisfactory care of any patient demands that vari- s methods available for treatment of his disease be ught under reappraisal, from time to time, regard- s of the apparent efficacy of some particular method t may, for the moment, be predominantly prac- ed.

During recent years the problem of cervical osteo- hritis or cervical spondylosis has been examined m various aspects with renewed interest.[13,17,18,23,24,] [0] Brain[11] stated: "Cervical spondylosis is a major ıse of serious disability." Frykholm[17] published an ıaustive review of the literature. Clarke and Rob- on[13] in their comprehensive account of the problem ted their interest to the observations of Wenzel[38] d Lane,[20] particularly regarding the influence of uma and strains.

Lane remarked that "the same holds true for the vical region also, that the posterior portions of the dies of the vertebrae are very liable to injury during vements of vigorous adult life." However, Schnei- r et al.[28] in a study of chronic trauma to the cervical ne in the divers of Acapulco, Mexico, demonstrated ıt there is actually very little traumatic change to posterior margins of the vertebral body but that th certain diving techniques, damage was present the anterior portion. This would seem to indicate ıt trauma in itself was not responsible for changes cervical spondylosis or it would have been seen in s group of performers.

Although the clinical implications of cervical spondylosis were clearly stressed by Bailey and Casamajor[4] with examples of five cases over half a century ago, the layman and physician alike have been inclined to believe that the disease was purely a sign of advancing age, and at first glance the increased longevity of our population might be regarded as a reason for the amount of attention being paid to this entity.

* * *

HOWEVER, PHYSICIANS suddenly have begun to realize that many patients afflicted with this disease are in the middle age group and are still desirous and capable of leading a productive life if they can be treated successfully. Many of these patients are being doomed to an entirely invalided existence with the erroneous diagnosis of some incurable disease: amyotrophic lateral sclerosis, lateral sclerosis, multiple sclerosis, etc. It was suggested that if a diagnosis of cervical spondylosis with compression of the spinal cord or nerve roots could be made early, decompressive operations of the nerve roots, and/or the spinal cord, might restore the patient to a useful existence.[1,7]

This presentation is based upon the study of 32 *carefully selected* patients who had been suffering from cervical osteoarthritis with intractable pain and/or neurologic disability, and who had not responded to a full course of conservative therapy. They were treated surgically during the interval from June 30, 1954, through June 1, 1962. In each operation the posterior cervical laminectomy route was used with incision of the dura, section of the dentate ligaments, and both extradural and transdural excision of soft intervertebral discs, bony foraminal spurs, and central bony ridges.

In this group there were five females and 27 males.

Table I shows that 81 per cent of these patients were in the age group between 45 years and 60 years, still within a highly productive period of life.

SIGNS AND SYMPTOMS

Often the diagnosis of cervical spondylosis with

Doctor Odeku is now Chief of Surgery (University Ibadan), Ibadan, Nigeria, West Africa.

Doctor Schneider is Professor of Surgery, Univer- y of Michigan School of Medicine.

TABLE I

Age	
38 yrs.	1
39 yrs.	1
45-50 yrs.	8
51-55 yrs.	11
56-60 yrs.	7
61-65 yrs.	4
Total	32

bony compression may not be readily established and indeed it may sometimes complicate other disease entities such as amyotrophic lateral sclerosis or even a spinal cord tumor as noted by Braham and Herzberger.[8] The symptoms were thought to be related to the nerve roots, spinal cord, the involvement of both of these structures, or as is now apparent, perhaps occasionally due to impairment of vascular supply of the spinal cord. The nerve root compression may take the form of numbness, pain, paresis, or paralysis of the dermatomes and myotomes, respectively, innervated by any one or several nerve roots (Figure 1B). With spinal cord compression there may be paresis, spasticity, paralysis, or bladder and bowel impairment. (Figure 1C). There may be symptoms of combined root and spinal cord compression (Figure 1A).

* * *

AND FINALLY, when dizziness, instability of gait, incoordination, and visual difficulty are recorded, vascular insufficiency to the cervical spinal cord should be suspected.[11,29] In these latter instances a lesion may be found at the site of origin of the vertebral arteries from the great vessels in the chest, in the captive course of the vertebral artery in the vertebra foramina, or in the prebasilar branches of the vertebral arteries and their termination, the anterior spina artery. None of our patients showed athetosis.[2,16]

X-ray studies of the spine in cervical osteoarthriti or spondylosis should include not only the anterior-

TABLE II

Symptoms Suggesting Degree of Involvement	
Root	13
Spinal Cord	5
Root and Cord	14
Total	32

TABLE III

Duration of Symptoms	
Less than 1 month	2
1 to 6 months	10
7 mos. to 1 yr.	5
1 to 2 yrs.	5
2 to 3 yrs.	3
3 to 4 yrs.	2
4 to 5 yrs.	1
6 yrs.	2
9 yrs.	1
14 yrs.	1
Total	32

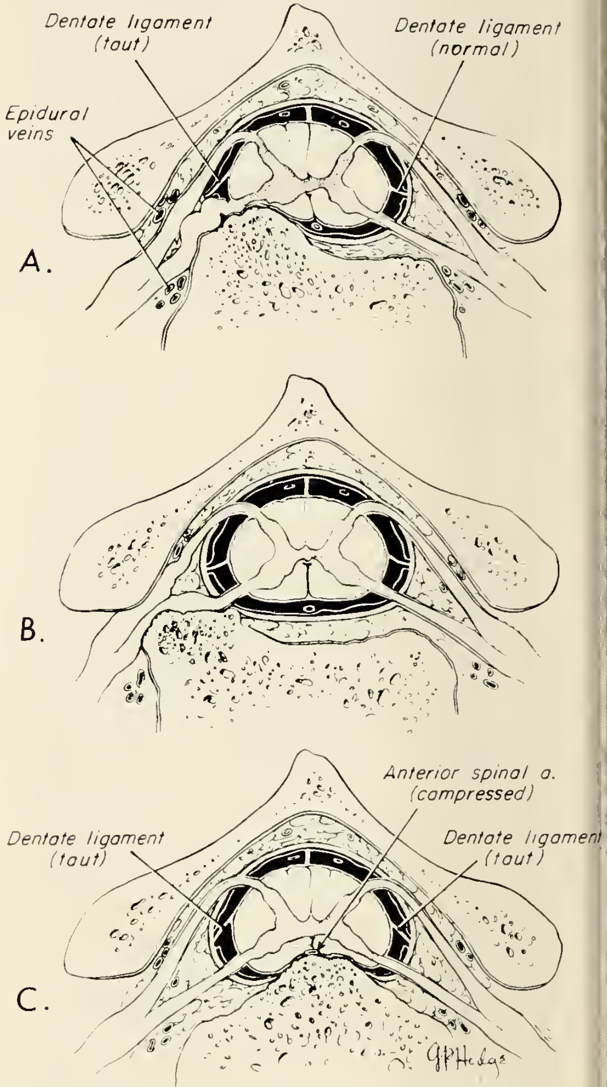


Figure I.

A. This diagram illustrates bony compression of the anterior root of a left cervical spinal nerve and the left anterolateral portion of the cord. There is *no* compression of the sensory root.

B. The intraforaminal compression is demonstrated of both the sensory nerve root and the motor root by a hypertrophic bony spur without spinal cord impingement.

C. The cervical spinal cord and the anterior spina artery are compressed by a medially placed hypertrophic spur or central bony ridge. The dentate ligaments may prevent further posterior displacement of the spinal cord.

sterior and lateral views but also stereoscopic ob- ue views and odontoid studies. The oblique views ill aid in identifying the location of the bony spurs nd exclude other diseases. When spurs cannot be lequately visualized in the 45 degrees oblique view, ms taken at 30 degrees or 60 degrees sometimes ave been more definitive and helpful. The apparent egree of bony impingement on the cervical foramina n the x-ray film may thus be remarkably altered by e degree of rotation of the cervical spine. Atlanto- xial dislocation may occur not too infrequently in steoarthritis; therefore this must be ruled out in the ifferential diagnosis. The significance of the anterior- osterior diameter of the cervical spine (as measured 200 adults by Wolf et al.[39]) regarding the production of neurologic deficits in the presence of spondy- tic changes has been thoroughly discussed by Payne nd Spillane in their study of 90 adult subjects.[23]

* * *

THE PRESENCE OF A *bony spur does not neces- rily mean significant compression of the nerve root assing through the foramen.* This is well exhibited postoperative cases. The nerve root and spinal ord have been demonstrated to be well decompressed rgically by spur and central ridge excision, and yet comparison of the preoperative and postoperative -ray films may still show the existence of a bony pur excrescence well lateral to the foramen, depend- g upon the angle at which the oblique view is taken.

LABORATORY STUDIES

On lumbar punctures 62 per cent of these patients ad a cerebrospinal fluid protein determination which as well above normal limits, i.e., if 45 mg% is used s a top normal figure.

TABLE IV

Protein	
Below 45 mg %	12
46- 60 mg %	9
61- 75 mg %	3
76-100 mg %	6
108 mg %	1
200 mg %	1
Total	32

Only a few patients had a complete subarachnoid pace block on bilateral jugular vein compression test Queckenstedt). A fairly high percentage of the ases had a partial or incomplete blockage of the ubarachnoid space, the occlusion being precipitated r aggravated by very slight flexion of the cervical pine.

ELECTROMYOGRAPHIC STUDY

This examination should be performed on all patients in an effort to localize the site and degree of nerve root compression. The initial study presents a baseline with which other subsequent evaluations may be compared. In this series, electromyograms were obtained in the last 20 patients (in the earlier cases the procedure was not available), and in 15 it was regarded as being of definite value.

MYELOGRAM

This procedure should be cautiously performed using 12 cc of pantopaque in order to fill completely the cervical subarachnoid space. Severe forced hyperextension of the cervical spine during this procedure must be avoided, for there is the possibility of squeezing the cervical spinal cord between the anterior bony spur and the posteriorly wrinkled ligamentum flavum, which may also be thickened, or an over-riding lamina.[4,5,6,9]

Care must be taken to avoid having the dye break into globules since a smoothly contoured pantopaque column is necessary to demonstrate the pattern of the nerve root sleeves. A translateral view of the myelogram is essential to identify the anterior indentations of the pantopaque column as the patient lies in the prone position.

RETROGRADE BRACHIAL ARTERIOGRAMS

These studies are now performed routinely on all patients with long spinal fiber tract signs. This phase of the problem is the topic of a separate paper which will be published later.

OPERATION

The surgical approach to cervical osteoarthritis or spondylosis varies in several ways from the routine cervical laminectomy for a ruptured cervical disc, and the postoperative convalescence is a more complicated and prolonged one.

* * *

MUCH OF THE SUCCESS or failure of the operation depends upon the preoperative preparation of the patient and his family. Usually the patient already has sustained severe chronic pain or prolonger paresis of the extremities driving him almost to a mental breaking point before operation is suggested, since the results of surgery in this condition have been recorded as being depressingly poor.[10,12,21] Because of this fear the procrastination on both the part of the patient and the physician has permitted further nerve root or spinal cord compression to continue, so that more damage has resulted.

The members of his family have watched him proceed futilely through the prolonged conservative course of visiting the family physician, osteopath, chiropractor, orthopedic surgeon, or neurosurgeon, one after the other, following the routine of adjustments, manipulations, heat, massage, exercises, cervical halter traction, muscle relaxants, and support such as braces and collars. They are apprehensive because in many instances they have been told surgery is of little value. This is true if there is an improper selection of patients or inadequate diagnosis and surgical therapy.

Therefore it is imperative to emphasize several points to the patient and family *preoperatively:* (1) The patient has osteoarthritis, a chronic disease, and even though the spinal cord or nerve roots are decompressed by operation there will occasionally be dull aching pain in the neck and back, particularly when it is cold or humid, since the underlying generalized disease is still present. (2) If there is radicular discomfort it may remain for a time after operation. Transiently there may be some increased numbness and weakness in an extremity because of the nerve root edema associated with necessary manipulation in removing the bony spur or central bony ridge. It may be likened to the situation in which the patient's arm is held firmly by an encircling grasp of the examiner's hand drastically reducing the blood supply to the forearm and hand and resulting in temporary numbness. When the examiner releases the pressure, the forearm and hand may remain numb for another interval but as "reawakening" occurs dull aching and tingling in the fingers and hands will take place. These neuritic symptoms are usually worse at night, particularly after midnight, when all extraneous noises have quieted down and only the involved nerve root is relaying pain impulses to the brain. When complete "reawakening" of the nerve roots has occurred and the circulation has returned to the extremity, the patient's numbness gradually vanishes, being supplanted by a dull ache, and finally the aching pain will disappear. The authors have found this brief explanation of the postoperative situation to the patient and his family to be particularly helpful. (3) The patient should be told that numbness, weakness, or muscular atrophy may persist permanently if the nerve root has been severely compressed for a prolonged interval. (4) If preoperative symptoms have persisted for a long time, the patient may expect to have progressive improvement for at least a year or a year and a half postoperatively. (5) There is obviously some anesthetic and operative risk to the procedure, but this is relatively slight compared to the patient's increasing discomfort and neurologic disability.

* * *

ANOTHER IMPORTANT problem is the careful review of the patient's disease status with the anesthetist or anesthesiologist. The occurrence of injuries to the cervical cord by unguarded manipulation at operations, during and after induction of anesthesia, have been stressed in reports such as Symond's.[34] Overzealous hyperextension of the cervical osteoarthritic spine[5,7,14,26,27] during intubation may cause further injury to the spinal cord. The ligamentum flavum perhaps may play an added role in exerting compression upon the cord.[26,27,30,35,36] The surgeon may be accused unjustly of causing damage to nerve root or cervical spinal cord which was inflicted in such a fashion by the anesthetist.

OPERATION

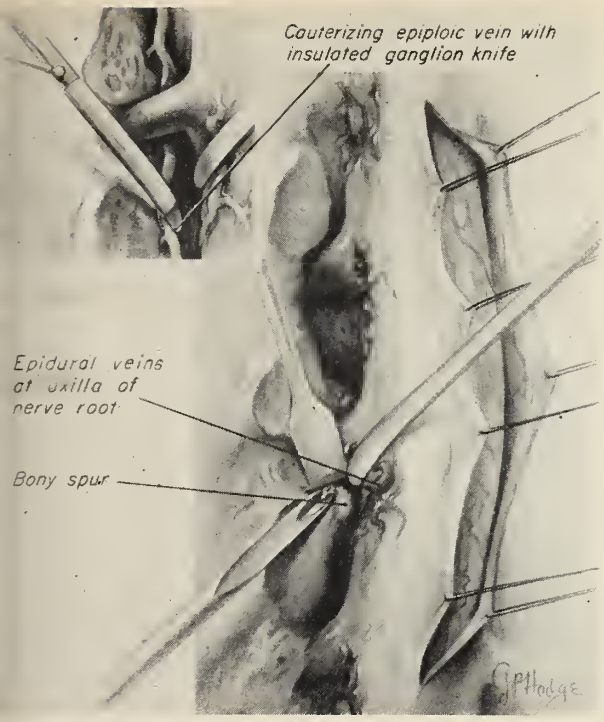
This is performed in the prone position with the cervical spine in as much *guarded* flexion as possible to spread the laminae facilitating laminectomy. At the time of positioning the patient on the operating table one should stabilize the head on the head rest in such a way that after the cervical laminectomy has been performed the neck may be placed in some degree of hyperextension at the time of removal of the bony spurs. This permits release of pressure on the cord and nerve roots and gives easier access to the pathologic bony spurs and ridges.

A complete laminectomy is performed to include a sufficient number of vertebrae for adequate exposure of the cord and nerve roots that have been shown to be involved. The operative exposure must be extended well laterally to include extradural exposure of the roots, but yet it must be sufficiently limited so as not to injure the intervertebral articular facets and their associated ligaments.

* * *

THIS EXPOSURE requires the use of the sharp biting Kerrison punch with a thin lip, which will not compress the already compromised tight cord or nerve root by further posterior pressure. The surgeon employing a dull punch with a wrenching motion may disrupt a weakened facet perhaps leading to a postoperative dislocation of the cervical spine. In this series of 32 cases this complication has not occurred. The epidural veins are most numerous in the axilla of the nerve root and the injudicious cauterization of them may cause damage to the root with subsequent postoperative neurologic deficit. If these veins rupture at this site it is wise to control the hemorrhage with a piece of oxycel and *gentle* pressure with an overlying cotton pledget. Whenever possible it is best to begin cauterizing the epidural veins against the margin of the bony canal with an insulated ganglion knife at a point between the nerve roots while the dura over the spinal cord is very gently retracted (Figure 2A Insert). This maneuver is best accomplished just before opening the dura and arachnoid; if not, releasing the pressure of the cerebrospinal fluid "water jacket" may permit rupture of the epidural veins causing profuse hemorrhage.

The dura is opened in the midline and the arachnoid is incised laterally near the dentate ligament attachments. If it is desirable to leave the dura open at the end of the procedure, the dura should overlie the lateral arachnoid incisions and the arachnoid itself should cover the medial dural incision to prevent



igure 2.

A. (Insert). An epidural vein is being cauterized vith an insulated ganglion knife compressing it against he bony wall of the spinal canal. Another ganglion nife is *gently* retracting the dura medially. Note the elationship of the vein overlying the nerve root and he "axilla" of the root.

B. The dura has been incised, the arachnoid opened ilaterally, and the attachments of the dentate ligaments cut. The dura is retracted medially with stay utures. The nerve root sleeve and dura over the cord re *protected, not retracted,* by the Scoville retractor nd ganglion knife, respectively. An initial groove has lready been made under the root. Further bone removal *under* the "axilla" of the nerve root is being perormed with a Gardner chisel.

ny leakage of cerebrospinal fluid. The dentate ligament attachments are cut at all accessible points s recommended by Kahn.[19] This also facilitates nobilization and inspection of the cord and roots ntradurally.

The dura is drawn medially with stay sutures and n extradural approach is made to excise the bony pur and ridge (Figure 2B). Next, the air-turbine riven drill is employed judiciously to avoid catching the instrument in loose fibrous tissue with the anger of deflection toward the spinal cord. It is then ossible to melt away some of these spurs.

* * *

BY THIS METHOD the operation is much more asily performed than with the older method of he hand chisel and gouge. The downcutting curette, the use of which is advocated by Mayfield,[22] has been found too large and bulky by the authors. It may be satisfactory for central ridge excision by some surgeons but it is not practicable for work around the cervical foramina. For these reasons, fine, sharp oral surgery gouges and chisels have been employed in the cases presented here.

The axilla of the nerve root is protected with a Scoville root retractor and a ganglion knife. The pointed Gardner chisel is first driven firmly with its point away from the nerve root so that the bone chips may slide upward into the diamond shaped aperture. After this initial excision the point may be directed deeply downward under the nerve root (Figure 2B). Further excavation may be made with the 1 mm or 2 mm Davis root teasers (named for the dental root work for which it was designed, although the neurosurgeon believes it to be correctly designated for his own field in view of its newly adopted application) (Figure 3). The teaser may be employed to tunnel further under the root first from the "axillary" approach and then from the "shoulder" of the nerve root. The bone fragments are curetted away from under the root pressing downward and away from the root and the cord.

A similar procedure is carried out contralaterally and then the central ridge is attacked, always breaking the bone downward into the newly created tunnel and moving it outward from under the roots. This is the technique suggested by Cramer some years ago. If the nerve root is extremely taut or the central ridge looms particularly high medially it may be desirable to shift to a transdural technique. A longitudinal

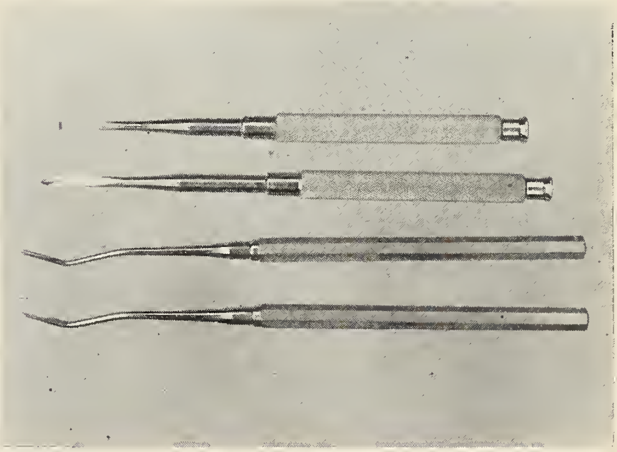


Figure 3.

Fine, sharp and strongly constructed oral surgery instruments which have been employed for the removal of bony spurs and central ridges in cervical spondylosis.

From bottom to top: No. 7 and No. 6 Davis root tip teasers, No. 5 Gardner chisel, and No. 1 Wakefield double bevelled osseous chisel.

transdural incision is made paralleling the cord (Figure 4A). Sheet cottonoid strips are placed over the nerve root and the spinal cord to keep them moist. The Scoville retractor and a ganglion knife are inserted in the margins of the dural incision separating it.

* * *

THERE IS NO *retraction of the cord or root but merely protection of these structures* so if there should be a slip of the chisel they would be cushioned. (Figure 4B Insert). In the illustration one sees the flattened sensory root in a cephalad position with the bulging, edematous motor root displaced medially by an underlying spur.

In such a case the patient would have motor root compression without any sensory changes. The intradural attack is directed first over the shoulder of the involved root rather than in the axilla, thus removing the spur from above and avoiding further damage to the already compromised motor root. A piec of gelfoam is placed over the transdural incisio and the main posterior dural incision is closed wit interrupted black silk sutures.

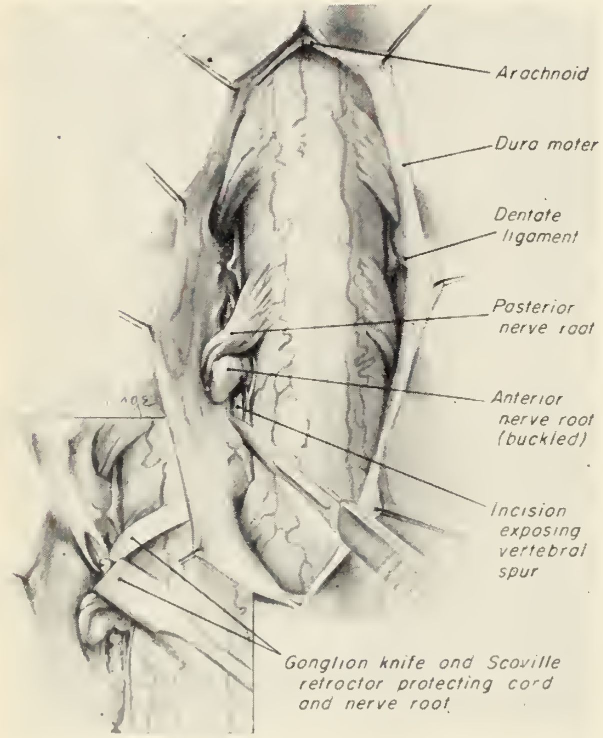

Arachnoid
Dura mater
Dentate ligament
Posterior nerve root
Anterior nerve root (buckled)
Incision exposing vertebral spur
Ganglion knife and Scoville retractor protecting cord and nerve root

Figure 4.

A. The dura is held wide apart by stay sutures. The dura is being incised prior to further transdural excision of the bony spur and central bony ridge. Note the caudal displacement of the bulging edematous motor root. The sensory root is minimally distorted.

B. (Insert). The shoulder of the sensory root is *protected* by the Scoville retractor and the spinal cord by the ganglion knife. The Gardner chisel is shown removing a wedge of bone.

The remainder of the wound is approximate tightly using wire for muscle and fascial layer chromatic catgut stitches for the subcutaneous tissu and black silk sutures for the skin.

* * *

THIS IS A TEDIOUS operation which should b undertaken neither by the neophyte neurosurgeo nor one who is short-tempered and impatient. Th cauterization of the vessels must be carefully pe formed. When near the spinal cord or nerve ro the oxycel must be applied with gentle pressure fo hemostasis. Obviously any deflection of the chisel o gouge or any rash retraction of the root or the spin cord will result in serious permanent neurologic di ability, rendering disservice to the already invalide patient.

The various combinations of surgical procedur used in this series are listed below.

TABLE V

Types of Operation	
Dentate ligaments only cut	5* # # #
Spur excision only	
1 spur	6
2 spurs	3*
3 spurs	2
Soft disc excision plus bony spur	
Same space as spur	2
Associated at other space with two spurs	1
Associated with three spurs	4
Soft intervertebral disc plus ridge excision	
1 ridge	1
2 ridges	2
Bony spur plus central ridge	
1 ridge	2*
2 ridges	4
Total	32

*Arachnoiditis
# Atrophy of spinal cord

EARLY POSTOPERATIVE RESULTS

It may be noted from the summary, Table V, th three of the patients showed an atrophy of the co in which neither compression of the nerve roots the spinal cord could be regarded as responsib for the neurological signs and symptoms. And ye in one of these individuals, a 62-year-old woma there was unequivocal improvement merely after se tion of the dentate ligaments.

In three instances there was marked arachnoiditi Separation of adhesions posteriorly and laterally i these cases provided some improvement in the ne rologic status.

* * *

IN GENERAL, IT MAY be said where simple multiple nerve root involvement occurred the resul were indeed most gratifying, but where signs and symptoms related to spinal cord impairment occurred only a mild to moderate degree of recovery was achieved.[37] Stoops and King[33] have set up criteria for evaluation which were not available at the time of our study.

The following case report demonstrates what can be accomplished by surgery for some patients with cervical spondylosis and generalized osteoarthritis.

* * *

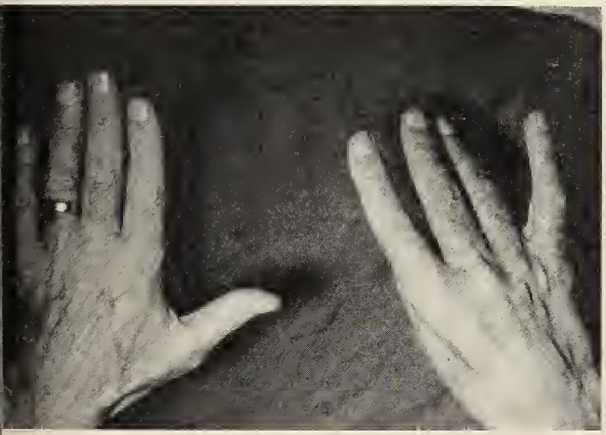
CASE REPORT: G.R., a 61-year-old right-handed man, vas admitted to St. Joseph Mercy Hospital on December 28, 1956. About four weeks prior to admission he developed a pain in his right shoulder radiating along the posterolateral aspect of the arm to the little finger. A week later he noted weakness of flexion of his fingers. The left arm was painless and he had a full range of motion. After four days of halter traction, the symptoms referable to the right arm seemed to improve somewhat but then the patient had a recurrence of nis pain and neurosurgical consultation was sought. He had not worked for over ten years, due to severe osteoarthritis of his back and both hips. When he walked he was bent over, supporting himself on two canes. At the time of hospitalization two months prior to this visit, cup arthroplasty nad been suggested to him because of dull aching pain in nis back and in both hips, particularly the right one, but the patient declined operation.

Examination revealed a slow and unstable gait as he eaned forward supported on his two canes. However, there vas no decompensation of movement in walking. He had narked weakness in flexion and extension of the fingers and n the intrinsic muscles of the right hand with paresis of the right opponens muscle (Figure 5). There was some fasciculation in his right triceps muscle. He had no sensory change in the right upper extremity. The deep tendon reflexes were intact and there were no pathological reflexes.

X-rays of the spine demonstrated degenerative changes of he entire spine with marked osteophytosis and bony bridging between the various vertebral bodies. These changes were nost marked in the lower cervical vertebra with severe narrowing of the C5-C6 and C6-C7 intervertebral spaces and marked impingement of osteophytes upon the associated intervertebral foramina bilaterally. A cervical myelogram showed a large filling defect at C5-C6 on the right side where a large bony spur was seen projecting posteriorly (Figure 6).

On January 12, 1957, a complete laminectomy of C4, C5, C6 and C7 was performed. Extradurally the C5, C6, and C7 nerve roots were noted to be immobilized, compressed, and fixed at their bony intervertebral foramina. The dura was then incised in the midline and the dentate ligaments cut. Further checking of the nerve roots demonstrated similar intradural compression. The C6 motor root was pale and edematous. Decompression of the C5, C6, and C7 nerve roots was accomplished using the fine oral surgery instruments both intradurally and extradurally with a trough made under the roots and the dissection carried laterally into the intervertebral foramina. The dura was closed and the remainder of the wound sutured in layers.

The patient's postoperative convalescence was characterized by a prompt relief of radicular pain, and he was given intensive physiotherapy to improve the strength in his



igure 5.

Preoperative pictures of the patient's hands demontrating the inability to abduct the right thumb and noderate paresis in extension of the fingers. The degree of atrophy of the interosseous muscles is marked n the right hand but may also be seen to a lesser legree in the left hand.

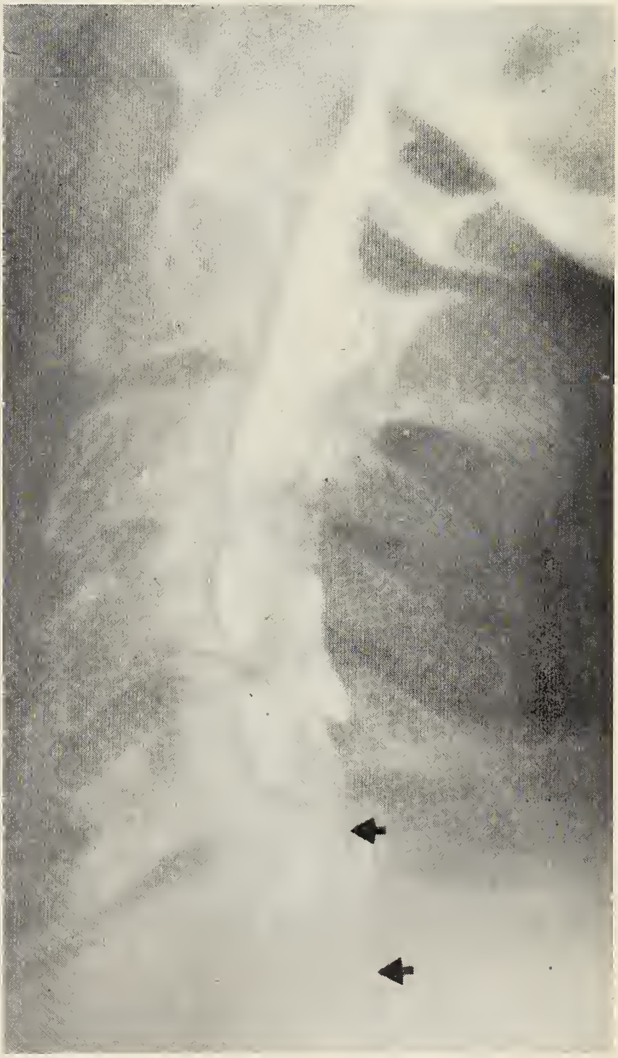


Figure 6.

The cervical myelogram shows a large filling defect at C5-C6 and C6-C7 intervertebral spaces (arrows) due to large bony spurs projecting posteriorly.

right hand. On February 11, 1957, the patient was discharged, still showing marked improvement in his condition.

Eleven months later the patient was readmitted to the hospital for arthroplasty of the right hip. By this time he had regained functional use of the right arm and hand. Although the intrinsic muscles of the hand still remained atrophied the strength was remarkably good (Figure 7). Both hip joints were badly involved with osteoarthritis (Figure 8 Top). Doctor Louis Kivi of the Orthopedic Surgery Department inserted a Moore prosthesis over the right hip for coxae malum senilis on January 9, 1958. The patient did nicely after this procedure, so that by March 14, 1958, he was walking about with marked improvement in all ranges of motion of the right hip. On November 18, 1958, Doctor Kivi also inserted a Moore prosthesis in his left hip. Postoperatively the patient did well and after extensive physiotherapy he was discharged on February 25, 1959, markedly improved with greatly increased motion in both hips and free of pain in both upper and lower extremities (Figure 8 Bottom). On follow-up examination in June of 1962 he could walk on the flat for short distances without using a cane, but for long walks he found the cane to be of aid in supporting himself. He was painfree and happy.

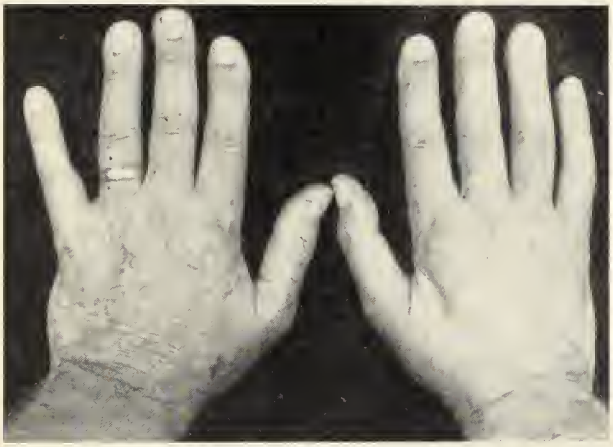


Figure 7.

The patient's hands are pictured 11 months postoperatively demonstrating good abduction of the right thumb and extension of all the fingers. The preoperative atrophy of the interossei muscles in the left hand has disappeared but persists to some degree in the right hand.

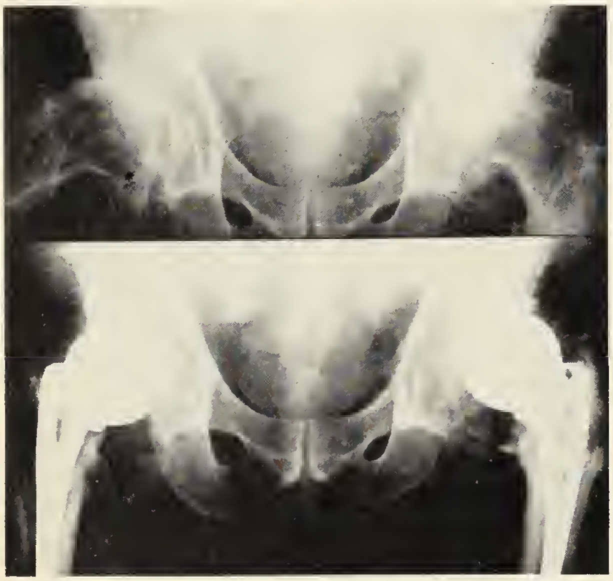


Figure 8.

Top. A preoperative x-ray film shows marked bilateral impairment of both hip joints by osteoarthritis.

Bottom. A postoperative x-ray film demonstrates effective postoperative bilateral arthroplasties with Moore prostheses performed by Dr. Louis Kivi.

* * *

COMMENT: Two years elapsed from the time of undertaking surgical relief of the numbness, pain, and weakness in his upper extremities until the patient had been rehabilitated by cup arthroplasties. This case demonstrated the ability of an orthopedic surgeon and neurosurgeon working as a team to rehabilitate a bedfast patient. He was made a more functional member of society, able to take care of himself.

DISCUSSION

In this series of 32 cases there was one hospital death. This occurred in a patient who had a cervical laminectomy and was explored intradurally. There was no nerve root and spinal cord compression but the patient succumbed about 11 weeks postoperatively of "ascending degenerative disease of the cord." A second patient returned home and 48 hours later died of a "pulmonary embolus." Unfortunately there was no postmortem examination to substantiate such a diagnosis. None of the remaining 30 patients were made permanently worse. A few had transient numbness, weakness, or pain, but this cleared up prior to discharge from the hospital.

The literature quite often confronts us with discouraging results from the management of neurologic defects from cervical spondylosis, especially when surgery is undertaken. Bailey and Casamajor[4] have pointed out that "the promises of therapy in osteoarthritis are not dazzling"—emphasizing also that the indications for surgical intervention are infrequent. Clarke and Robinson[13] claimed that "the results of treatment were on the whole disappointing, as far as return to full function was concerned."

* * *

MOST SURGEONS who have treated the affected patients generally agree that decompression of the spinal cord, roots, or a combination of both approaches is a desirable aim. Many writers advocate laminectomy alone or with sectioning of the dentate ligaments[3,9,14,15] claiming that "attempted removal of the ridge is hazardous."[3,5,33] Rogers[25] preferred the alternative method of "mobilizing" the entire spinal cord segments merely by extensive Cl-Tl complete laminectomy with the dura left open after sectioning the dentate ligaments. Removal of the soft, herniated intervertebral disc fragments should be accomplished, if indicated.[31]

Another recommendation makes use of foramenotomy and lysing of arachnoidal adhesions in addition to the laminectomy and dentate ligament release. Epstein et al[16] in their later report indicated that significant additional improvement was gained by the added efforts to remove offending spurs and bony ridges. Stookey[32] in dealing with anterior extradural cervical chondromas, employed the transdural technique using ventral paramedian dural incisions, emphasizing this as the approach of choice. In dealing with cervical spondylosis Scoville[30] advocated "partial or complete bilateral facetectomy with total uncapping of the root sleeves followed by an extensive laminectomy" without removal of the bony ridges. The problems of treatment by anterior fusion will be dealt with in Part II.

The posterior extradural and transdural approach to the problems of cervical osteoarthritis may not readily achieve any degree of popularity because of the care and time required for some of these procedures. However, since this series of 32 cases treated in this manner has demonstrated the various types of pathological findings encountered, it may well provide sufficient data to set up certain important criteria for necessary diagnostic measures and the surgical procedure of choice. Part II of this paper will present a detailed discussion of the results obtained and their significance.

SUMMARY

Thirty-two selected cases of osteoarthritis with intractable pain and/or neurologic symptoms and signs were treated by cervical laminectomy with extradural and transdural excision of a soft bony disc, bony spurs, and ridges.

In general, the results were excellent where single or multiple nerve root involvement seemed to be the problem. When the spinal cord symptoms and signs appeared to be the major problems there was only a mild or moderate improvement.

REFERENCES

1. Allen, K. L.: Neuropathies caused by bony spurs in the cervical spine with special reference to surgical treatment. J. Neurol. Neurosurg. and Psychiat., N.S. 15:20-36, 1952.
2. Anderson, W. W.; Wise, B. L.; Itabashi, H. H.; and Jones, M.: Cervical spondylosis in patients with athetosis. Neurology, 12:410-412, 1962.
3. Arnold, J. G., Jr.: The clinical manifestations of spondylochondrosis (Spondylosis) of the cervical spine. Ann. Surg., 141:872-889, 1955.
4. Bailey, P., and Casamajor, L.: Osteo-arthritis of the spine as a cause of compression of the spinal cord and its roots: with reports of five cases. J. Nerv. and Ment. Dis., 38:588-609, 1911.
5. Barnes, R.: Paraplegia in cervical spine injuries. J. Bone and Joint Surg., 30-B:234-244, May, 1948.
6. Barnes, R.: Mechanism of cord injury without vertebral dislocation. J. Bone and Joint Surg., 33-B:494-495, Nov. 1951.
7. Berkin, C. R., and Hirson, C.: Hyperextension injury of the neck with paraplegia. J. Bone and Joint Surg., 36-B:57-61, Feb. 1954.
8. Braham, J., and Herzberger, E. E.: Cervical spondylosis and compression of the spinal cord. J. Am. Med. Assn., 161:1560-1563, 1956.
9. Brain, W. R.; Northfield, D.; and Wilkinson, M.: The neurological manifestations of cervical spondylosis. Brain, 75:187-225, 1952.
10. Brain, R.: Cervical spondylosis. MM. Int. Med., 41:439-446, 1954.
11. Brain, R. et al: Discussion on cervical spondylosis. Proc. Roy. Soc. Med., 49:197-208, 1956.
12. Burke, W. J., and Selby, G.: Clinical features of cervical spondylosis. Australasia Ann. Med., 5:122-135, 1956.
13. Clarke, E., and Robinson, P. K.: Cervical myelopathy: a complication of cervical spondylosis. Brain, 79:483-510, 1956.
14. Epstein, J. A., and Davidoff, L. M.: Chronic hypertrophic spondylosis of cervical spine with compression of the spinal cord and nerve roots. Surg., Gynec., and Obstet., 93:27-38, 1951.
15. Epstein, J. A., and Epstein, B. S.: Neurological and radiological manifestations associated with spondylosis of the cervical and lumbar spine. Bull. New York Acad. Med., 35:370-386, 1959.
16. Epstein, J. A.; Epstein, B. S.; and Lavine, L. S.: Cervical spondylotic myelopathy. Arch. Neurol., 8:307-317, 1963.
17. Frykholm, R.: Cervical nerve root compression resulting from disc degeneration and root-sleeve fibrosis: A clinical investigation. Acta Chir. Scandinavica, Supplement 160, 1951.
18. Hadley, L. A.: The covertebral articulations and cervical foramen encroachment. J. Bone and Joint Surg., 39-A:910-920, July, 1957.
19. Kahn, E. A.: The role of the dentate ligaments in spinal cord compression and the syndrome of lateral sclerosis. J. Neurosurg., 4:191-199, 1947.
20. Lane, W. A.: Some points in the physiology and pathology of the changes produced by pressure in the bony skeleton of the trunk and shoulder girdle. Guy's Hosp. Rep., 43:321-434, 1886.
21. Liversedge, L. A.: Cervical spondylosis. Postgrad. M.J., 35:380-383, 1959.
22. Mayfield, F. J.: Cervical spine trauma: Neurosurgical aspects. Clin. Neurosurg., 2:83-100, 1954.
23. Payne, E. E., and Spillane, J. D.: The cervical spine. An anatomico-pathological study of 70 specimens (using a special technique) with particular reference to the problem of cervical spondylosis. Brain, 80:571-596, 1957.
24. Reid, J. D.: Effects of flexion-extension movements of the head and spine upon the spinal cord and nerve roots. J. Neurol. Neurosurg. and Psychiat., N.S. 23:214-221, 1960.
25. Rogers, L.: The treatment of cervical spondylitic myelopathy by mobilization of the cervical cord into an enlarged spinal canal. J. Neurosurg., 18:490-492, 1961.
26. Schneider, R. C.; Cherry, G.; and Pantek, H.: The syndrome of acute central cervical spinal cord injury. With special reference to the mechanisms involved in hyperextension injuries of cervical spine. J. Neurosurg., 11:546-577, 1954.
27. Schneider, R. C.; Thompson, J. M.; and Bebin, J.: The syndrome of acute central cervical spinal cord injury. J. Neurol. Neurosurg. and Psychiat., N.S. 21:216-227, 1958.
28. Schneider, R. C.; Papo, M.; and Alvarez, C. S.: The

(Continued on Page 544)

ORIGINAL SCIENTIFIC ARTICLE

The ocular toxicity of chloroquine is described. Methods of early diagnosis are noted along with some methods of treatment. Two cases are reported; one, typical, the other having most unusual ophthalmoscopic findings.

The Ocular Toxicity Of Chloroquine

By Leonard H. Lerner, M.D.
Lawrence L. Stocker, M.D.
Robert I. Gans, M.D.
All of Detroit

INTRODUCTION

During the years of World War II, the drug Chloroquine (7-Chloro-4-(4-Diethylamino-1-Methybutal-amino) Quinoline was extensively used for the suppression and treatment of malaria. However, the length of time and the dosages employed were such that the ophthalmologic complications were trifling, consisting almost entirely of disorders, transient in nature, of the accommodative mechanism.

In the years following World War II, the drug had been used extensively for the treatment of rheumatoid arthritis and disseminated lupus erythematosus.

* * *

THESE CHRONIC diseases necessitated the use of the drug for very long periods of time and since 1957 an extensive body of literature has established both corneal and retinal toxicity as a complication of the use of Chloroquine for such extended periods of time.

Combiaggi[1] in 1957 first reported a patient who had been treated with 500 mg of Chloroquine daily for two years for systemic lupus erythematosus who had a brownish pigmentation in the macular region with associated narrowed vessels. The next year Hobbs and Colnan[2] reported peculiar corneal deposits present in the epithelium of a significant percentage of those patients who were on prolonged Chloroquine therapy. They reported that the Chloroquine deposits disappeared upon cessation of the drug. Other reports[3,4,6,8] indicated extreme frequency of such corneal deposits, but the agreement was general that discontinuation of the drug results in disappearance of these corneal deposits.

In 1959 reports[5] of retinopathy associated with Chloroquine therapy began to appear. A pattern began to emerge which has generally shown the retinopathy to be a rare complication of prolonged Chloroquine therapy, but one characterized by irreversibility and often times progression of the disease in spite of the discontinuation of the therapy.[9,10,11,12,13,14,15,16,17,18,19,31]

CLINICAL PICTURE

The patients have usually been on Chloroquine therapy for a minimum of a year and most of them a good deal longer when they begin to notice a disturbance in their central visual acuity. An examination often reveals narrowed retinal arterioles and a pigmentary disturbance in the macular region. Early cases show a fine deposition of black pigment in the macular region; more advanced cases show a denser accumulation of pigment in the macular region with some scattered pigmentary changes in the retinal periphery, and far advanced cases show alternating bands of pigment and absent pigment giving a rather typical "bull's eye" appearance to the macular region. Examination of the visual fields shows central and peri-central ring scotomata.

The physical findings rarely improve and often progress in spite of the cessation of the drug. Changes in the ERG have been reported to be frequent and early in cases of toxicity, often being the earliest diagnostic sign of ocular toxicity and one reported to be present in a very large percentage of cases of all patients taking Chloroquine. HRR color vision test abnormalities have been described as a useful early indicator of those patients who will develop typical Chloroquine retinopathy.

The most characteristic field defect is a peri-central scotoma and decreased dark adaptation is found as a late effect of the drug. The changes in the ERG suggest that the involvement is in the first and second neurones.[13]

The corneal changes have been found in 35 to 100 per cent of the patients taking the drug for a prolonged period[15] and are described as superficial punctuate conglomerations of opacities in whorl-like patterns over the cornea. Histologic examination of the denuded epithelium in one case showed puncti-

---

Doctor Lerner is Assistant Clinical Professor in Ophthalmology, Wayne State University, Detroit.

Doctor Stocker is also an assistant Clinical Professor in Ophthalmology, Wayne State University, Detroit.

Doctor Gans is with Sinai Hospital, Detroit.

form intra-cellular inclusions with sparing of the nucleus.

PHARMACOLOGY

Chloroquine has long been known to concentrate very markedly in the liver, spleen, kidney, lungs and leukocytes. The brain and spinal cord in contrast have always been known to be low concentrators of the drug. It is known that Chloroquine is excreted in the urine and it has been recently pointed out acidification of the urine can bring about two to four fold increase in Chloroquine excretion.

A recent study revealed the startling fact that the drug can be indentified in plasma, RBC's and urine of patients who received their last dose of the drug five years previously.

BAL (Dimercaprol) was found to increase the excretion of Chloroquine in one patient and to increase the secretion of a Chloroquine metabolite in another.[20] Chloroquine has been found to concentrate heavily in melanin granules. It has recently been suggested that Chloroquine toxicity is on the underlying basis of vascular response.[29] One case of an acute anterior uveitis associated with 750 mg of Chloroquine per day for two months has been reported and this cleared with steroids and discontinuation with Chloroquine.[30]

PATHOLOGY

Pigment migration from the pigment epithelium, loss of rods and cones, arteriolar occlusion and narrowing have been found on pathological examination of affected eyes. Large cells laden with pigment granules are found in the outer nuclear layers and the outer plexiform layers, some in the areas of rods and cones. The destruction of rods and cones is widespread.[24,26,27] Until recently there was some difficulty producing the lesion in experimental animals, probably due to inadequate length of exposure to the drug.[28,32]

CASE REPORT #1

A 24-year-old white female who had taken Chloroquine 500 mg per day for six years for chronic lupus erythematosus was seen February 18, 1964. She had had no Chloroquine for the previous two-and-a-half years. Her best corrected vision was 20/60 on the right and 20/50 on the left. Intraocular pressure was normal. Peripheral field examination revealed markedly diminished isopters for a 1:330 white target and Amsler charting of both macular regions showed marked distortions which did not involve the actual fixation point. Both macular regions showed a pallorous background with a prominent central reddish pigment area and a large underlying area of macula which was pale yellow.

The remainder of the retina showed fine gray round and irregular pigment deposits scattered throughout, some suggesting bone spicules. Inferiorly the pigment was distributed, suggesting cobblestones. ERG was read as extensive visual cell damage. Examination on follow-up visits showed no significant change in the above findings.

CASE REPORT #2

A 24-year-old white female who had been on Chloroquine for approximately four years, was first seen on October 31, 1964. She first complained of visual difficulties in early 1964 which slowly progressed. She consulted a very competent ophthalmologist who was unable to confirm the diagnosis of Chloroquine retinopathy because of the most unusual fact that observation of the macular regions with direct ophthalmoscopy showed no architectural disturbance.

Her best corrected vision was 20/400 upon initial examination, and central visual fields revealed bilateral large central scotomata. She had been off her Chloroquine therapy since September, 1964, with no significant subjective changes since that time. Direct ophthalmoscopy by three experienced ophthalmologists who specifically looked for the architectural changes characteristic of Chloroquine retinopathy failed to reveal any evidence of architectural disturbance. Indirect ophthalmoscopy on the other hand easily elucidated the macular pathology. A pallorous macular region was seen with fine gray stipling of this pallorous area. The foveolar region showed slight heaping up of reddish macular pigment. Electroretinography revealed extensive damage to the visual cells. She was treated with Ammonium Chloride in an attempt to hasten the excretion of the Chloroquine, but this had to be discontinued because of the precipitation of an acute attack of gout.

DISCUSSION

In this era of modern therapeutics it behooves every physician who uses drugs to be aware of their unusual toxic reactions. An ever increasing number of diseases have been reported wherein the disease has been produced by the administration of drugs.

All physicians using Chloroquine in their practice plus those ophthalmologists seeing patients on Chloroquine should certainly be familiar with the toxic effects of Chloroquine. Since the serious toxic effects are quite rare, each physician must weigh the advantages to be gained from the use of Chloroquine vs the risks due to the unusual toxic effects of the drug. The ocular toxicity of Chloroquine can probably be detected in an early stage even prior to a patient's subjective complaint provided routine and regular ophthalmologic examination is performed with a view towards observing any very early effect of the drug.

Although the usefulness of the drug in each individual case is a decision for the physician to make, it should be made with an awareness of those effects already known and with a strong suspicion that as

Co-author

Leonard H. Lerner, M.D.

yet unreported deleterious effects of any drug, including Chloroquine, may occur.

SUMMARY

The ocular toxicity of Chloroquine has been described, and an unusual case of Chloroquine retinopathy has been reported wherein the characteristic macular damage could be only viewed with the aid of indirect ophthalmoscopy.

BIBLIOGRAPHY

1. Combiaggi, A.: Unusual ocular lesions in a case of systemic lupus erythematosus. AMA Archives of Ophthalmology, 57:451, 1957.
2. Hobbs, H. E., and Colnan, C. D.: The ocular complications of chloroquine therapy. Lancet, I:120-209, 1958.
3. Pau, H., and Baumer, A.: Corneal chloroquine deposits. Kin. Monatsel f. Augenh., 135:362-377, 1959.
4. Hobbs, H. E., and Colnan, C. D.: Visual disturbances with anti-malarial drugs with particular reference to chloroquine keratopathy. AMA, Derm., 80:557-563, Nov. 1959.
5. Hobbs, H. E., Sorsby, A., and Freedman, A.: Retinopathy following chloroquine therapy. Lancet, II:478-480, Oct. 3, 1959.
6. Rogers, P. A.: The cornea and chloroquine. Aust. J. Derm., 5:10-11, 1959.
7. Walter, C. J.: Retinopathy following chloroquine therapy. Med. J. Aust., 1:741, 1961.
8. Calkins, L. L.: Corneal epithelial changes occurring during chloroquine (aralen) therapy. AMA Arch. Ophth., 60:981-987, Dec. 1958.
9. Ellsworth, R. J., and Zeller, R. W.: Chloroquine induced retinal damage. Arch. Ophth., 1166:269-272, 1961.
10. Smith, J. L.: Chloroquine macular degeneration. Arch. Ophth., 68:186-190, 1962.
11. Okun, E., Gouras, P., Bernstein, H., and von Sallman, L.: Chloroquine retinopathy. Arch. Ophth., 69:59-71, 1963.
12. Price, L.: Retinopathy associated with chloroquine. Trans. Ophth. Soc. Aust., 21:35-38, 1961.
13. Janson, F.: ERG changes in chloroquine therapy. Acta. Ophth., Supplement 70, pp. 252-257, 1962.
14. Jansen, L. M. A. A.: Retinopathy after nivaquine treatment. Ophthalmologica, 144:438-444, 1962.
15. Hobbs, H. E., Eadie, S. T., and Somerville, F.: Ocular lesions after treatment with chloroquine. Brit. J. Ophth., 45:284-297, April, 1961.
16. Penner, R., and Somers, K.: Bilateral macular degeneration associated with prolonged chloroquine therapy. ASO, 54:381-385, 1962.
17. Wilson, W.: Retinopathy during chloroquine treatment. Brit. J. Ophth., 45:756-758, Nov., 1961.
18. Reed, H., and Campbell, A. A.: Central scotomata following chloroquine treatment. Canad. M.A.J., 86:176-178, Jan. 27, 1962.
19. Karo, T., and Mantyjarvi, M.: Eye complications caused by chloroquine in patients with rheumatoid arthritis. Act. Ophthal., 41:189-192, 1963.
20. Rubin, J. J., Bernstein, H. N., and Zvaifler, N. J.: Studies on the pharmacology of chloroquine. Arch. Ophth., 70:474-481, 1963.
21. Gouras, P., and Gunkel, R. D.: The EOG in chloroquine and other retinopathies. Arch. Ophth., 70:629-639, 1963.
22. Algvere, P., Carlberg, O., and Ericson, L.: Acta. Ophthal., 41:469-472, 1963.
23. Golden, S., and von Donge, N.: Calif. Med., 98:338-339, June, 1963.
24. Bernstein, H., Svaifler, N., Rubin, M., and Mansour, A. M.: The ocular deposition of chloroquine. Investrg. Ophth., 2:384-392, August, 1963.
25. Ziv, B.: Contradictory findings in chloroquine-treated patients. AJO., 57:311-312, 1964.
26. Bernstein, H. M., and Ginsberg, J.: The pathology of chloroquine retinopathy. Arch. Ophth., 71:238-245.
27. Wetterholm, D. H., and Winter, F. C.: Histopathology of chloroquine retinal toxicity. Arch. Ophth., 71:82-87, 1964.
28. McConnell, D. G., Wachtel, J., and Havener, W. H.: Observations on experimental chloroquine retinopathy. Arch. Ophth., 71:552-553, 1964.
29. Monohan, R., and Horns, R.: Trans. Amer. Acad. Ophth. & Otolaryng., 68:40-44, Jan.-Feb., 1964.
30. Lazar, M., Regenbogen, L., and Stein, R.: Ophthalmologica, 146:411-414, 1963.
31. Nozik, R. A., Weinstock, F. J., and Vignos, P. J.: The ocular complications of chloroquine. Am. J. Ophth., 58:774-778, 1964.
32. Dale, A. J. D., Parkhill, E., and Layton, D. D.: Studies on chloroquine retinopathy in rabbits. JAMA, 3:241-243, July 19, 1965.

SPONDYLOSIS

(Continued from Page 541)

effects of chronic recurrent spinal trauma in high-diving: A study of Acapulco's divers. J. Bone and Joint Surg., 44A:648-656, June, 1962.

29. Schneider, R. C., and Schemm, G. W.: Vertebral artery insufficiency in acute and chronic spinal trauma. With special reference to the syndrome of acute central cervical spinal cord injury. J. Neurosurg., 18:348-360, 1961.
30. Scoville, W. B.: Cervical spondylosis treated by bilateral facetectomy and laminectomy. J. Neurosurg., 18:423-428, 1961.
31. Spurling, R. G.: Lesions of the Cervical Intervertebral Disc., p. 34. Springfield, Ill., Charles C Thomas, 1956.
32. Stookey, B.: Compression of the spinal cord due to ventral extradural cervical chondromas: diagnosis and surgical treatment. Arch. Neurol. and Psychiat., 20:275-291, 1928.
33. Stoops, W. L., and King, R. B.: Neural complications of cervical spondylosis: their response to laminectomy and foramenotomy. J. Neurosurg., 19:986-999, 1962.
34. Symonds, C.: The interrelation of trauma and cervical spondylosis in compression of the cervical cord. Lancet, 1:451-454, 1953.
35. Taylor, A. R.: The mechanism of injury to the spinal cord in the neck without damage to the vertebral column. J. Bone and Joint Surg., 33-B:543-547, Nov., 1951.
36. Taylor, A. R.: Mechanism and treatment of spinal-cord disorders associated with cervical spondylosis. Lancet, 1:717-720, 1953.
37. Teng, P.: Spondylosis of the cervical spine with compression of the spinal cord and nerve roots. J. Bone and Joint Surg., 42-A:392-407, April, 1960.
38. Wenzel, C.: Uber die Krankheiten am Ruckgrathe. Bamberg, W. L. Wesche, 1824, 460 p.
39. Wolf, B. S., Khilnan, M., and Malis, L. I.: The sagittal diameter of the bony cervical spinal canal and its significance in cervical spondylosis. J. Mt. Sinai Hosp., 23:283, 1956.

The authors wish to thank Doctor Louis Kivi for his kindness in permitting publication of his work on the patient whose case history was presented.

MICHIGAN MATERNAL MORTALITY STUDY

A 15-Year Survey

1950-1964

ORIGINAL
SCIENTIFIC
ARTICLE

3y Hermann A. Ziel, Jr., M.D.
.ansing

The Michigan Maternal Mortality Study has been continuing activity of the Committee on Maternal Iealth of the Michigan State Medical Society in ooperation with the Michigan Department of Health ince 1950.

The objective of the study is to determine, by cientific and confidential analysis, all factors involved n maternal deaths occurring in Michigan so that:

1. **Avoidable factors in maternal deaths may be reduced or eliminated; and,**
2. **Better maternal care may be assured through improvement in the teaching and practice of obstetrics.**

The study is conducted according to the "Guide or Maternal Death Studies," published by the Comnittee on Maternal and Child Care of the Division of ocio-Economic Activities of the American Medical Association.

* * *

ACTUAL RESPONSIBILITY for the study and valuation of each maternal death occurring in Aichigan is vested in the Maternal Mortality Subommittee of the Committee on Maternal Health. This subcommittee includes representation from the Aichigan Department of Health and the Medical chools at the University of Michigan and Wayne tate University.

A maternal death is defined as the death of any voman dying of any cause whatsoever while pregiant or within 90 days of the termination of pregnany, irrespective of the duration of pregnancy at the ime of termination or the method by which it is erminated.

A variety of sources are used to insure completeess of reporting of the deaths. These sources include eath certificates filed with the Michigan Department f Health; individual reports submitted to the study by attending physicians and hospital medical record librarians; and monthly hospital reports filed with the Michigan Department of Health.

* * *

EACH MATERNAL death is investigated by a Regional Visiting Obstetrician. A questionnaire and narrative summary are completed for each death following an interview with the attending physician and others closely concerned with the patient's care, review of the available records in the physician's office and in the hospital, and an interview with the pathologist with review of the autopsy protocol when a post-mortem examination was done.

The confidential nature of the information obtained was assured by Act 39, Public Acts of 1957. This Act, signed by the Governor May 17, 1957, is designed to safeguard the confidential character of research studies conducted by the State Health Commissioner. It states that information, records, reports, statements, notes, memoranda or other data pertaining to the study would not be admissible as evidence in legal action of any kind.

The Regional Visiting Obstetrician is paid a fee and expenses for his services by the Michigan Department of Health.

The completed questionnaire and summary are returned to the study and the pertinent information and data are abstracted. The Maternal Mortality Subcommittee reviews each death and prepares certain additional information for educational purposes. This includes the presentation of the case studies at meetings of the Regional Evaluation Committees, at other professional meetings, and in the classes at our medical schools. Several articles based upon

"Medicine in Our Changing World"

Theme for MSMS Annual Session, Grand

Rapids, September 27-28-29-30

Doctor Ziel is Chief, Maternal Health Section, Aichigan Department of Health, Lansing, Michigan.

material from the study have been published in scientific journals.

* * *

INDIVIDUAL MATERNAL deaths are classified as follows:

DIRECT OBSTETRIC DEATH

A death resulting from complications of pregnancy itself, from intervention elected or required by the pregnancy, or resulting from the chain of events initiated by the complication or intervention. (These deaths are due to causes listed in the International Classification of Diseases Adapted, Codes 640-689.

(a) Hemorrhage
(b) Toxemia
(c) Infection
(d) Vascular
(e) Anesthesia
(f) Other
(g) Undetermined

Indirect Obstetric Death

A death resulting from disease existing before or developing during pregnancy (not a direct effect of the pregnancy) which was obviously aggravated by the physiological effects of pregnancy and caused the death.

(a) Cardiac disease
(b) Vascular disease
(c) Reproductive tract disease
(d) Urinary tract disease
(e) Hepatic disease
(f) Pulmonary disease
(g) Metabolic disease
(h) Other
(i) Undetermined

Non-Related Death

A death occurring during pregnancy or within 90 days of the termination from causes not related to pregnancy, its complications or its management.

(a) Communicable or infectious disease
(b) Blood dyscrasia
(c) Malignancy
(d) Suicide
(e) Accident
(f) Other
(g) Undetermined

MATERNAL MORTALITY RATE

Only those maternal deaths which are due to direct obstetric causes are used in determining the maternal mortality rate (MMR). This rate is determined as follows:

$$\frac{\text{Number of maternal deaths due to direct obstetric causes}}{\text{Total live births}} \times 10{,}000 = \text{MMR}$$

MATERNAL MORTALITY TISSUE REGISTRY

In addition, a Maternal Mortality Tissue Registry has been established at the University of Michigan Medical Center under the direction of A. James French, M.D., Professor and Chairman, Department of Pathology. With the cooperation of the pathologists of the state, it has been possible to accumulate tissue specimens, tissue slides and other pertinent information for many of the maternal deaths included in the study. During the period 1960-1964 there were a total of 522 maternal deaths of which 394 or 75.7 per cent were autopsied. While it is not yet possible to obtain tissues and slides on every case autopsied, the wealth of teaching material is obvious.

DISCUSSION

The maternal mortality rate has decreased significantly over the 15 years of the study reflecting the great strides made by medicine in the post-war era (See Table I). This is particularly evident in the

Table I
Deaths Due to Direct Obstetric Causes, 1950-1964

	1950-1954		1955-1959		1960-1964	
	Number	Rate*	Number	Rate*	Number	Rate*
Livebirths**	880,708		1,005,590		919,996	
Deaths due to direct obstetric causes	406	4.61	356	3.54	321	3.49
Hemorrhage	166	1.88	163	1.62	95	1.03
Infection	62	.70	60	.60	111	1.21
Toxemia	81	.92	45	.45	22	.24
Vascular	38	.43	46	.46	59	.64
Anesthesia	39	.44	24	.24	18	.20
Other	20	.23	18	.18	16	.17

*Rate per 10,000 livebirths
**Livebirths by occurrence

Table II
Direct Obstetric Deaths Due to Infection, 1960-1964

	Less than 20 weeks' gestation		20 weeks' gestation or more	
Total deaths due to infection	Criminal or self-induced abortion	Other	Criminal or self-induced abortion	Other
111	52	13	2	44

Table III
Direct Obstetric Deaths Due to Vascular Causes, 1960-1964

Total deaths due to vascular causes	Air embolism due to criminal or self-induced abortion	Amniotic fluid embolism	Other
59	21	21	17

eduction of deaths due to hemorrhage, toxemia and nesthesia.

The number and rate of direct obstetric deaths due o infection and vascular causes have increased in umber and rate and deserve further clarification. In Tables II and III, it is evident that criminal or self-nduced abortion was responsible for 54 deaths due o infection and 21 deaths due to vascular causes (air mbolism). In addition, there were two deaths resultng from the introduction of a foreign substance into he uterus to induce abortion. With the elimination of hese 77 direct obstetric deaths, which can be conidered entirely avoidable, the maternal mortality ate during the five years 1960-1964 would be reduced o 2.65 per 10,000 live births.

In addition to the avoidable deaths due to crimnal or self-induced abortion, there were 172 maternal leaths due to direct obstetric cause which were conidered to have avoidable factors. If only one-half of hese deaths associated with avoidable factors could ave been prevented, the maternal mortality rate luring the five-year period 1960-1964 would be furthr reduced to 1.72 per 10,000 live births.

In addition to direct obstetric deaths, there was, luring the five-year period 1960-1964, a total of 187 naternal deaths due to indirect and nonrelated causes See Table IV). One-half of the deaths due to inlirect obstetric causes and a substantial number of leaths due to non-related causes were also associated vith avoidable factors. During this same period, a otal of 15 maternal deaths were unclassified as to ause.

CONCLUSIONS

The Committee on Maternal Health of the Michian State Medical Society and the Michigan Departnent of Health are convinced of the value and necesity of continuing the Michigan Maternal Mortality Study as part of their continuing effort to:

Provide a better understanding of the physical, emotional, and social factors associated with maternal deaths and, by inference, maternal morbidity; and to

Improve the teaching and practice of obstetrics with a realistic hope that ever better maternity care, available to and utilized by Michigan mothers, will result in decreased maternal mortality and improved perinatal salvage.

Table IV
Deaths Due to Indirect and Non-related Causes, 1960-1964

Deaths due to indirect causes	
Cardiac	21
Pulmonary	18
C.N.S.	18
Vascular	14
Urinary tract	10
Hepatic	8
G.I. tract	6
Metabolic	4
Other	5
Total	104
Deaths due to non-related causes	
Malignancy	16
Accident	13
Communicable or infectious disease	10
Blood dyscrasia	6
Suicide	5
Murder	2
Other	29
Undetermined	2
Total	83

SEX EDUCATION, ORGAN TRANSPLANTS, SEEN AS COMMON CONCERNS OF DOCTOR, MINISTER

(Following are quotations from an address by Rev. Wallace Robertson, pastor of the interdenominational Peoples Church of East Lansing, at the 1966 MSMS Workshop on Medicine and Religion.)

What are the areas of continuing dialogue between physicians and clergymen?

One is sex education. You have given us the pill and various methods of birth control. My own feeling is, "Thanks be to God," in the face of the population explosion and problems of food production. In the year 2000, it has been said, we may be facing an imbalance between population and food supply. The new morality, which magazines are writing about, is here. Students say: "Your morality is passé; we are living in a new morality." You know, as I do, about the increase in the incidence of venereal disease, of experimentation in the realm of drugs—LSD, marijuana, etc.

Together we have a problem of facing the establishment of a moral basis upon which we can deal with integrity with the new discoveries becoming available.

* * *

WHAT ABOUT the whole idea of geriatric medicine—nursing homes—Medicare? The clergy has a real concern for the planting of trained, equipped counselors in the hospitals across America.

What about the exchange of information between doctors and clergy? The question of prognosis? How much information should the doctor give to the clergyman? How much information, in turn, should the clergyman share with the patient?

Is there some area in which we can explore together in a factual manner, in a professional way, how we actually deal with the problem of prognosis and the "question-and-answer game?" "What do you know about my condition? What has the doctor said to you? How do you understand what is going on?" Very often, clergymen blow it and talk out of a vast fund of ignorance. Maybe, a well established hospital chaplaincy might cover this gray area.

* * *

WHAT ABOUT ORGAN transplants? My children will be able to go to a bank and get a new kidney, heart, or pair of lungs. We are probably moving into the realm of continuity of life, whic
raises the question: "Does man have a moral righ
to die?" What if science says to him, "We'll kee
you going for another 150 years, Jim?"

It raises questions in life in Asia . . . abortion . .
suicide . . . death.

What about treatment of the body after it ha
ceased to be physiologically alive?

The whole matter of burial will probably be solve
by the shortage of land. Cremation will probabl
come about through civil law.

If you and I don't deal with it, society will.
am not sure that society is as competent to dea
with it as the professions are.

* * *

LET'S CONSIDER the fundamental basis fo
dialogue between physicians and clergymen—it i
our common concern for the welfare of huma
beings. Basically, you are looking upon them a
patients; we, as constituents or members of a congregation. We share a joint concern for their well-being.

Historically, we have had an excellent relationship between religion and medicine. Some of th
great hospitals started in this country were the re

Rev. Wallace Robertson, of East Lansing, present
the major address at the MSMS Workshop on Medicine and Religion on "The Doctor and the Clergyma
—A Continuing Dialogue."

sult of religious organizations, and some still bear the names of the religious groups from which they sprang.

* * *

THE JUDEO-CHRISTIAN religion has, from the first, had a very vital part in the treatment of the whole person, including the physical being. At various times in the history of the two professions, there have been periods of misunderstanding. This has not been eliminated entirely, but what you are doing now and what is hopefully happening now in the life of the clergy is devoted to eliminating the tensions that have on occasion in our history sprung up.

We are moving toward a full view of man, toward a growing awareness of the treatment of the whole man. Talking about man as a physiological mechanism does not exhaust the possibilities. Man is a mental being, able to reflect on his actions. He has reflective ability. He can take a look at himself and say, "I blew it," or "I did it well." He can approve or condemn his actions.

Man is a moral being. He has a point of view that causes him to make some moral or value judgements in his relationships.

Man is a mortal being. Every man recognizes at some point in the game that he has a common, universal destiny called death.

Thus, we look upon man as having mental and moral and mortal potential.

* * *

WE ARE MOVING into a psychosomatic concern much more pointed than the two professions have had before. The church is aware of this. MSMS has a Committee on Medicine and Religion. The church is doing much more in hospital, clinical training. Hardly a man comes out of the seminary today without some hospital or clinical or chaplaincy training. Every good seminary today requires its students to take a psychiatric course. There are counseling ministers, men who are specialists in what constitutes a good counseling situation.

I hope you will agree that we are moving into a more defined area in which medicine and the clergy can discuss their common concerns.

WHAT ARE THESE common concerns?

One of them is the type of image we present. There are some real duds among the clergy—but I have met some real medical duds in my time, too. We have a common concern to present the best kind of image. You have done a better job in moving into some type of professional unity. We are still much too much fragmentized. Through the Council on Theological Education, we are moving into the kind of standardization that will be acceptable for a high level of experience and training.

We are trying to bring men into a meaningful participation in their society, to introduce them to the abundant life. There is a prevalent misconception that the clergyman is more concerned with death than with life. This is not true. The major thrust in the modern clergy is to prepare men for abundant living.

* * *

WE LIVE IN AN era of depersonalization. Yet, you know and I know that each person who walks into our office is a unique person. We are so involved in the time aspect that we are viewing them more and more as mass humanity.

In the face of the problems of the modern world, man finds himself as a member of the "lonely crowd," with a growing awareness, a gnawing realization, that nobody cares.

* * *

IN SUMMARY, we as clergy are concerned about what goes on in life, not just about what comes after. I would hope that you would feel that we could be the kind of people that you could refer persons to who you sense are psychosomatic, without real physical problems, so we could counsel with them. We are not now adequately prepared, it is true, but we are moving in that direction. We are developing specialists in the realm of counseling.

Basically, we stand in the tradition of the Great Physician, who said: "I come that they might have life, and that they might have it more abundantly." This is the basis of all medical and clergy dialogue.

Noted and Quoted

"Since it is the medical profession that has been largely responsible for much of the increase in leisure time in America—especially among the aging—the profession ought to employ the wisdom and resources at its disposal to make this leisure something more than 'the most dangerous threat hanging over American society.' "

—Lawrence L. Suhm, Director
Center for Leisure Resources Development
University of Wisconsin

"The problems and challenges of medical practice and education, now and in the future, stem mainly from the increasing flood of new scientific information which is splintering the medical profession into a sprawling family of subspecialties and is spawning a spate of diverse paramedical groups. The physician's education must fit him to meet the resulting challenge to his captaincy of the health team, coached by the great authoritarian university which will increasingly control all medical practice."

—Roald N. Grand, M.D., Director
Professional Education
American Cancer Society
New York

DESCRIBES RAMIFICATIONS OF SMOKING

(Following are some of the comments about airway obstructions made by Roger S. Mitchell, M.D., cancer researcher, Denver, during his address on "The Challenge of Chronic Respiratory Disease" during the Conference on Medical News Writing, sponsored by MSMS and several other groups.)

According to death certificates in this country, some 15,000 to 20,000 persons die each year of emphysema, chronic bronchitis and asthma. In Great Britain, on the other hand, the rate is many times higher.

It is well known that these persons frequently die of pneumonia, heart failure and lung blood clots; they also die in a stuporus state correctly labeled "respiratory failure," but frequently misdiagnosed as a stroke. As a consequence, a great many persons who die of these conditions are either not so recognized during life or if they are correctly diagnosed, only the immediate cause of death is recorded on the death certificate and reference to the underlying emphysema or bronchitis is hidden or overlooked.

* * *

IT HAS BEEN estimated that the true number of persons dying prematurely as a result of chronic airway obstruction in this country each year may be from 100,000 to as high as 300,000. All authorities agree that the number is rising more rapidly from this group of diseases than for any other group.

Another approach to the question of frequency is a consideration of the number of persons who are disabled by these conditions. This figure is also not accurately known, but it has been estimated to be at least five million Americans at the present time.

At least 95 per cent of persons with these diseases have been regular cigarette smokers. In addition, cessation of cigarette smoking frequently leads to cessation of coughing and, if patients with severe chronic airway obstruction do stop smoking and coughing, their life expectancy is prolonged.

I believe that some persons have some kind of predilection for emphysema and/or chronic bronchitis and thus rarely may develop it without smoking; if they do smoke, however, these particular people appear to be very much more apt to develop these diseases than are others. I have no idea what the nature of this predilection is.

How does smoking cause harm?

It paralyzes the cilia temporarily. Over a period of years of smoking the epithelium lining the airways will be replaced by a thick layer of abnormal cells without cilia. The increase in mucus glands is clearly the result of chronic irritation from smoking and other forms of air pollution. Nicotine has been shown to cause clotting of blood in heart capillaries, the tiniest blood vessels. Capillary thrombosis has been observed in early emphysema by electron microscopy.

Is this one of the ways in which cigarette smoke damages lungs? The carbon monoxide from cigarette smoke may also do harm by diminishing the delivery of oxygen into the tissues.

* * *

FOR YEARS IT has been known that the lungs of persons living in cities are more apt to be studded with black pigment than those of persons living in rural areas. This condition has been labeled "anthracosis," which indicates that the black stuff is coal dust or carbon.

We became interested in this problem because we found that cigarette smokers were also more apt to have black lungs than were nonsmokers. Then we found that the black pigmentation was even more apt to be found in emphysematous lungs than in normal lungs. The association with cigarette smoking therefore may simply be a reflection of the fact that emphysema and cigarette smoking are closely related. The exact cause and effect relationships, if any are therefore not clear.

Several of my associates have been engaged for at least three years in trying to find out what this black pigment is. At present all they can say is that it is seldom pure carbon and that it is often different in different lungs. However, the exact nature of these substances is still a mystery. It is probably not melanin, a black pigment which may indicate that tissue damage has occurred. It may be that the black material is not in itself injurious, but is acting simply as a carrier for noxious materials which have been neutralized or disappeared with the passage of time.

The degree of black pigmentation increases with advancing years. All of our lungs under the age of eight have been free of black pigment, and all ungs past the age of 43 have been pigmented to ome degree. Past the age of 45 or 50, the degree of pigmentation does not seem to increase. This is he extent of our knowledge about this subject at he present time.

* * *

VARIOUS ENVIRONMENTAL factors have effects upon the lungs. For example, the air which passes down the windpipe has a constant partial pressure of water vapor. When an individual breathes very dry air, the water vapor is maintained he same by extraction of water from the tissues of he airways. This drying effect can be distinctly rritating to the delicate tissues of the airways.

When we go up into the mountains, the altitude has quite interesting effects upon the lungs. For one thing, air contains less oxygen the higher up we go. It is also dryer, colder and cleaner. If we go high enough, the deficiency of oxygen will make tself felt as shortness of breath on exertion because t takes deeper and faster breathing to accomplish a given stint of work. After remaining at altitude for a sufficient period, the lack of oxygen will stimulate the bone marrow to produce excess numbers of red blood cells and will even cause spasm of the small lung arteries and thus cause high blood pressure in the pulmonary circulation.

What scientific knowledge in the field of respiratory disease does the public not now have which they should have? I should put at the head of such a list the *potential reversibility* of many features of the diseases chronic bronchitis, emphysema and asthma to which I have referred.

A second point is the tremendous importance of *neglected chronic cough and early nondisabling shortness of breath on exertion.* These signs are all too often disregarded as the normal result of advancing years or cigarette smoking and therefore not important potential indications of treatable or preventable disease. Americans seem to feel instead that chronic coughing is a privilege. I am convinced that many cases labeled emphysema and/or chronic bronchitis can be arrested or slowed down if not actually improved if proper attention is given them in time.

A third important lack of public knowledge is the growing importance of heart disease resulting from chronic lung disease, so-called "cor pulmonale." A large number of persons certified as dying of heart disease are in fact persons who suffer from chronic lung disease whose hearts have failed primarily because of their lung disease. The frequency of *lung heart disease* in a survey made in Great Britain a few years ago was approximately 30 per cent of all cases of heart failure. In this country it is probably nearer 5 to 10 per cent.

FINALLY, TOO LITTLE is known about a very serious and treatable condition known as *respiratory failure.* This is the situation which occurs in persons who have chronic lung disease, especially chronic bronchitis and emphysema, who have a flare-up due to a pneumonia, sometimes relatively mild, to a deep chest infection or often to the injudicious use of sedative drugs for some purpose. The symptoms of irritability and restlesness which appear to indicate the need for sedative medication may in fact be early signs of impending respiratory failure in chronic pulmonary patients.

The correct treatment of these symptoms in such patients is the correction of whatever is causing the patient to breath inadequately. When symptoms are treated without regard to their cause, sedative drugs can make the situation worse by supressing breathing even more.

When You Prescribe Depressant Drugs, Or Stimulants:

Any physician who writes prescriptions for depressant and stimulant drugs covered under the Drug Abuse Control Amendments of 1965 must follow these provisions, reported by the American Medical Association:

1. Prescription orders for stimulant and depressant drugs must bear the name and address of the patient, and the date of issue, and must be signed by the prescriber; the physician may give the prescription order by telephone, or by direct oral instructions followed up by a written, signed order.

2. No prescription order can be renewed more than five times, nor can it be dispensed or renewed more than six months after the date of issue. Although after five renewals, or six months, the physician may issue a new prescription, he cannot give authorization for refilling the old order. These requirements apply to all prescriptions as of February 1, 1966, regardless of the date of issue.

CARRIES SELZER ARTICLE

The close relationship between alcoholism and traffic deaths will be emphasized in June for members of the Michigan Chamber of Commerce.

Challenge, the Chamber's monthly magazine has printed "Alcoholism and Traffic Fatalities: A study of Futility" by Melvin L. Selzer, M.D., and Sue Weiss of the University of Michigan Medical School. Doctor Selzer, a member of the MSMS Committee on Alcoholism, is an associate professor of psychiatry at U-M.

Stresses Role of MD in VD Control

**By John A. Cowan, M.D., Chief
Division of Adult Health
Michigan Department of Public Health**

If venereal disease is to be controlled, it will be due in a large part to the increasing participation of the practicing physician in this activity.

In September of 1965, the American Medical Association began a national VD awareness campaign aimed at prevention and prompt treatment of these diseases.

At that time, Charles L. Hudson, M.D., AMA President-Elect said, "Statistics (on VD rate escalation) are just more than merely disquieting ones; they are alarming to the point that they scream for remedial action. I wonder just how strongly I can emphasize this to you: that it is *primarily, positively,* and *absolutely* the responsibility of the practicing physician to take the initiative in bringing about a remedy to this situation!

* * *

"What is it that we physicians should do and must do?"

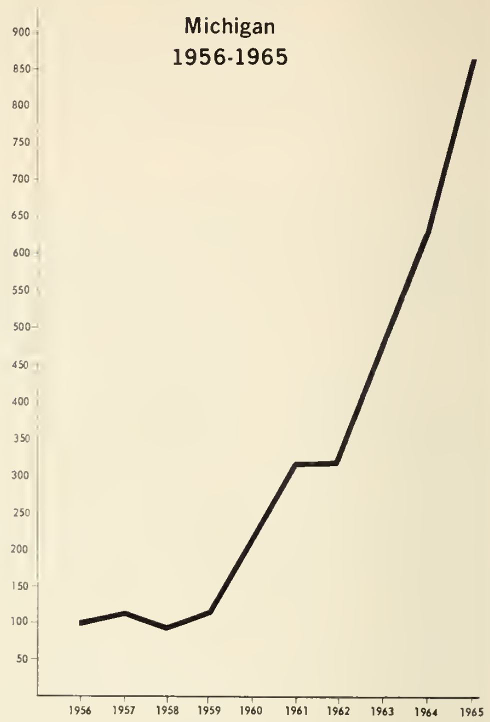
He emphasized three directives, in addition to working in full cooperation with the specially trained public health authorities:

1. To acquire a complete knowledge of VD, its manifestations, and its several stages.
2. To lend our assistance and experience to medical schools and teaching hospitals so that medical students can learn to identify and diagnose VD, and suspect its presence in all manner of illness.
3. To participate vigorously in public education—through newspaper coverage, radio and television programs, speaking engagements, and by lending support to school information and education programs.

In Michigan, the VD rate escalation amounts to more than a 900 per cent increase in primary and secondary syphilis morbidity during the last seven years. (See Figure 1.)

The 14,319 cases of gonorrhea reported in 1965 represent the largest number of cases ever reported in Michigan since tabulation was begun in 1910. These figures represent only reported cases, it is estimated nationally that the actual incidence of infectious syphilis and gonorrhea is over four times the reported figures. Each case of infectious venereal disease that is not identified, reported and source and spread contacts determined will result in the following:

1. It contributes to the spread of the disease.
2. It enlarges the existing infectious reservoir.
3. It eventually results in a higher attack rate in the population.
4. It substantially hinders any possibility for the control of syphilis.


REPORTED PRIMARY & SECONDARY SYPHILIS CASES
Michigan
1956-1965

* * *

With the expected reported incidence of infectious syphilis reaching more than 1,000 in 1966, *now* is the time when all available resources must be mobilized to combat these diseases.

Each local medical society should designate a Venereal Disease Control Committee. It should be the responsibility of this committee, in conjunction with local public health authorities, to keep the society continuously informed about the venereal disease problem in the community. In addition, this committee should recommend action that could be taken by the medical profession in educational programs for the practicing physician, or for the public as a whole and the schools.

The availability of many materials and services from the AMA will greatly strengthen such programs.

Most important, however, it is necessary that each individual physician have a high index of suspicion for venereal disease. It is also the responsibility of the physician to the community to insist that epidemiologic assistance be made available for his patient. It is a fallacy to believe that the patient-physician relationship is in jeopardy by the performance of venereal disease epidemiology. The persons performing this service in Michigan are highly-trained professionals and the keynote of their activity is confidentiality.

Activity Started To Identify MD More in Sports

Physicians who spoke at the Conference on Medical Aspects of High School Sports at the University of Michigan on June 2, expressed concern over the growing number of head and neck injuries in football.

Richard Schneider, M.D., Ann Arbor, who has studied football injuries for over five years said, "Head and neck injuries are on the increase, partly because the use of the head as an instrument of tackle in the stomach of the runner is taught as a coaching technique in the West and Midwest." Fifty-two per cent of serious and fatal football injuries are in the head and neck region.

Seventy-eight physicians attended the conference. John Goodsell, M.D., Saginaw, pointed out to the group that it is a joy to treat athletes because "they want to get well and get going in contrast to so many people we treat whom you must prod into getting well."

"Besides, when a doctor goes out to help a football player sprawled out on the field before 1,000 people," he continued, "people see that the doctor is doing his job. On the other hand, when there is no response to 'Is there a doctor in the audience?' it looks very bad."

Rivalries were set aside at the MSMS Conference on the Medical Aspects of Sports—two of the leaders were Gerald O'Connor, M.D., left, team physician at the U-M, and James S. Feurig, M.D., team physician for MSU and chairman of the sponsoring MSMS committee.

The Conference agreed that it establishes good community relations when physicians are willing to make their services available to athletic teams and help out in pre-season physical examinations.

Several follow-up conferences on the local level are now scheduled for team doctors, coaches, trainers and principals.

PG Series Draws Well

The offerings of the MSMS Committee on Postgraduate Medical Education during the 1965-66 year reached 801 physicians, or 60.9 per cent of the MSMS members in the 20 geographic areas served.

The statistics for the Upper Peninsula program are even better. The statistics there show that 151 physicians took part in the lectures and clinics at eight locations. MSMS membership in those eight areas is 190 physicians—so the records show that approximately 80 per cent of the members participated.

MSMS seeks to provide, wherever possible, the clinical conference approach to continue medical education. The clinical conference was developed on a pilot basis at Midland and proved valuable. For the past year or two, others have been held across the state with MSMS-provided medical educators as the experts.

Where clinical conferences cannot be arranged by the local medical society, MSMS provides didactic lectures by medical authorities.

The MSMS Committee on Postgraduate Medical Education is led by H. A. Towsley, M.D., Ann Arbor, as chairman.

"Dignity of Death" Among G.R. Topics

The 101st Annual Scientific Session of MSMS in Grand Rapids, September 27-28-29-30, will provide technical education to the MSMS members on scientific topics—and will also deal with some of the vital social concerns.

"The Dignity of Death" is the topic chosen for the fourth general session, September 28, by Rev. Paul B. McCleave, LL.D., Chicago. Rev. McCleave, head of the AMA department of medicine and religion, was well received last year in an address at the Centennial Session in Detroit.

Following this general assembly lecture, the fifth general session that afternoon will bridge into the topic of "The Doctor's Dilemma in a World of Changing Morals." Stuart M. Finch, M.D., Ann Arbor, will moderate a panel including Francis A. Allen, LL.B., a Chicago attorney; Harold I. Lief, M.D., a New Orleans psychiatrist; Rev. Gerald B. O'-Grady, Jr., Bloomfield Hills minister, and J. Robert Willison, University of Michigan obstetrician.

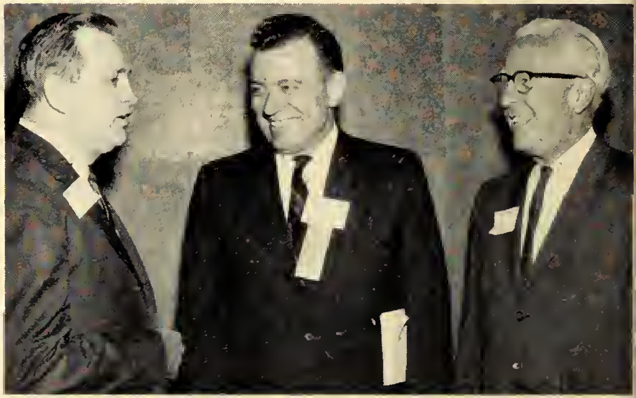
Another topic in this general field will be a Thursday morning, September 29, round table discussion on "The Physician and Marital Discord." Francis P. Rhoades, M.D., Detroit, will moderate with three subject-matter experts — Peter A. Martin, M.D., Detroit, psychiatrist; John R. G. Gosling, M.D., Ann Arbor, obstetrician, and Emily Mudd, Philadelphia marriage counselor.

The Seventh general assembly, September 29, will offer Malcolm H. Merrill, M.D., Berkeley, California, on "Population Trends and Medical Manpower Needs."

More information about topics and speakers will appear in the August issue of MICHIGAN MEDICINE.

Participants were keenly interested in the speakers, discussion and films at the MDPAC Workshop June 5, at the Sheraton-Cadillac Hotel, Detroit. In addition to the physician delegates, there were representatives from the Woman's Auxiliary and Medical Assistants.

Challenge Doctors Work in Politics



Two of the workshop leaders exchange experiences with Glen R. Davis, center, Republican Congressman from Wisconsin, who gave the luncheon address at the MDPAC Workshop. At left is Louis F. Hayes, M.D., Gaylord, workshop chairman, and Orlen J. Johnson, M.D., Bay City, MSMS Past President.

An appeal was made at the MDPAC workshop, June 5, in Detroit, for Michigan physicians "to add the weight of their talents, energies, endurance and commitment to the good fight."

State and national speakers told the 106 participants that physicians have two stakes in the success of MDPAC in Michigan and AMPAC in the nation . . .

"Your stake is the continuation of medical practice free of federal intrusion—a brand of practice that has enabled our profession to work wonders in health care. And your stake as an American citizen is in good government, in the success of the two-party system, in the purposes of the Founding Fathers who sought to safe-guard liberty in this land."

These challenges were issued by Frank C. Coleman, M.D., chairman of the AMPAC Board of Directors, who flew in from Tampa for the Michigan workshop.

The theme for the one-day conference was set by Louis F. Hayes, M.D., Gaylord, workshop chairman and House of Delegates vice-speaker, who declared, "The political arena cries for leadership, and the doctors can provide it." He suggested that Michigan physicians had talents to offer in three critical areas—political education, political effort and actual service as candidates.

W. C. C. Cole, Jr., M.D., Detroit, Chairman of the MCPAC Board, stressed that "Medicine must seek to extend its sphere of influence to the entire community." He recommended service not only on school boards and city councils, but also in state and national elected offices and political party affairs.

Physicians and their wives are molders of opinion and have great potential in the field of political action declared Vernon V. Bass, M.D., Saginaw, MDPAC Board member. Politics have invaded the practice of medicine and we can no longer afford the luxury of inactivity, he contended.

Two state legislators spoke. State Senator Garry E. Brown, Republican, 21st District, told the physicians to look for and support good candidates. He suggested that the criteria should include sympathy for the medical view on economic matters, similar social-action ideals, the ability to articulate, and ability to exercise good judgment.

State Senator Edward J. Robinson, Democrat, 12th District urged the physicians to "know their legislator" and the only real way to influence lawmakers after the election. "It is not enough to tell the legislator that you oppose some bill, you must state the reasons why," he pointed out.

The luncheon address was given by U. S. Representative Glenn R. Davis, Republican, Wisconsin, who said "we can't assure higher standards of public morality by being non-partisan."

MHC Supports Careers and Fights Quacks

Nearly 600 students, senior citizens, members of the medical and allied health professions took part in a two-day Health Congress sponsored by the Michigan Health Council in cooperation with the Soo Branch of Michigan Technological University.

The First Annual Upper Michigan Health Congress included a quackery program called "Duck the Quack." Members of the U. S. Food and Drug Administration, Detroit staff, portrayed to hundreds of Soo area senior citizens the techniques being used by quacks in bilking elderly citizens. Members of the medical, dental, pharmaceutical and nursing professions joined other area health and educational leaders at a banquet program. Owen Pinkerman, Royal Oak, president of Michigan Hospital Association spoke on the "Future of Health in Michigan."

High school and college students from Upper Michigan and Canada attended the one-day Health Careers Congress to hear Carl C. Byers, Ph.D., of Cleveland, and members of the health professions discuss opportunities in the health careers. The Chippewa-Mackinac County Medical Society provided a $100 U.S. Savings Bond to the student who wrote the most outstanding 300-word essay on "Why I am interested in entering a health career."

In future years, the Michigan Health Council hopes to conduct similar programs in the Upper Peninsula as well as in other parts of Michigan.

Hundreds of copies of the new AMA medical careers booklet, "Horizons Unlimited," were distributed to students, counselors and parents attending the Congress.

DICINE
ING REWARDING
Bright Future for You!

Among the leaders attending the First Annual Upper Michigan Health Careers Congress at Sault Ste. Marie were Doctor and Mrs. Donnell C. Howe, Jr. They are shown admiring he AMA Medical Careers Exhibit in he lobby of Michigan Technological University. Mrs. Howe is Dean of students at the University and deotes substantial time to the paramedical career programs being taught and planned at the university.

Horizons Unlimited

Physicians interested in helping to promote medical careers may obtain a copy of "Horizons Unlimited" with eight special insert pages of Michigan information by writing to MSMS, 120 West Saginaw, East Lansing. Copies are being sent to counselors, libraries, youth work leaders, etc., by the MSMS Public Relations Committee.

Governor Romney recently appointed the reorganized State Mental Health Advisory Council, and it included Edward H. Rodda, M.D., Bay City; Kenneth H. Magee, M.D., Ann Arbor, and Benjamin Jeffries, M.D., Detroit.

NEWS BRIEFS

GRAND RAPIDS—A new 12-member Kent County Mental Health Board and a new five-member Kent County Health Board have been appointed by the Board of Supervisors. The Kent County Medical Society spent considerable time and effort in studying these moves and in offering consultation.

Appointed to the Board of Health was William Haeck, M.D., and to the Mental Health Board, Stewart Bergsma, M.D., and Charles Farber, M.D.

* * *

DETROIT—A new instrument to detect diseases of the coronary arteries is being tested at Harper Hospital under a new John A. Hartford Foundation grant. It is a techinque of injecting radioactive Rubidium-84 into a vein to detect the presence of coronary artery disease.

Richard J. Bing, M.D., and Edward J. Zaleski, M.D., are the recipients of a $251,151 Hartford Foundation grant for the test.

DISCUSSES MEDICARE CHARGES

(Editor's note: The following timely article was written by A. J. Neerken, M.D., Chairman, MSMS Governmental Medical Care Programs Committee.)

The advent of Medicare finds physicians in considerable doubt and with some degree of apprehension concerning payment for their services. This is understandable since only vague guidelines have been set. The law refers to "reasonable charges" as the payment level.

In its proposal to the Social Security Administration, Michigan Medical Service has stated that the individual physician's customary charge and the prevailing rate in the community would be primary considerations. Thus, an equitable level of payment to every physician through the operation of a free market could be expected to result.

What, then, should be each doctor's policy in setting fees for patients coming under the Medicare program?

He should set the same fee which he customarily charges the average private patient who has received a comparable service—no more and no less. Antiquated and substandard welfare schedules should not be followed. Neither should fees for Medicare patients be raised above the level charged patients paying their own bills or insured under commercial programs. This is not to imply that valid across-the-board revisions in physicians' fee to meet increased costs in inflationary pressures should not be made.

The economics of medical practice are in a period of rapid change. The present Medicare law allows substantial freedom to each doctor to place his own valuation on his services. If we, as a group, behave with prudence and restraint, this freedom will be maintained. Should wholesale increases in patient charges occur in the next year or two, a fixed fee schedule will be inevitable.

There was lots of debate and informal discussion too at the recent Congress of the Professions in Detroit on the proposed resolutions. Grouped here are G. B. Saltonstall, M.D., Left, Charlevoix, MSMS past president and MAP treasurer; N. O. Saulter, P.E., Detroit, MAP past president; and MSMS President Luther R. Leader, M.D., Detroit, member of the MAP board of directors.

Two Michigan legislators made major contributions to the MDPAC Workshop in Detroit when they advised more than 100 physicians how to participate more effectively in political affairs. At left is State Senator Garry E. Brown, Schoolcraft Republican; and at right, State Senator Edward J. Robinson, Dearborn Democrat. See page 554 for article and more photos.

DETROIT—Robin C. Buerki, M.D., Detroit, has been named as liaison between Mayor Cavanagh's Citizen group and a professional advisory committee to study the Detroit health services for the poor. An eight-month survey by a managing consulting firm is planned. Leaders in the study indicate that the recommendations will bear on the future of Detroit Receiving Hospital.

It's Exam Time For Preschoolers

A public information program has been started to urge families to take their pre-school children during July or August to see their physician for a pre-school physical examination. The appeal is that families avoid the usual rush in September.

MSMS President Luther R. Leader, M.D., has issued an appeal that "each child should have a physical examination before entering school or kindergarten. To insure the best of service to the children, doctors recommend that appointments for the examinations be made as early as possible."

Michigan law (Section 376) states that all children entering school for the first time shall submit a statement signed by a physician that they have been immunized against smallpox, diphtheria, tuberculosis, tetanus, pertussis and poliomyelitis; a statement signed by one parent or guardian to the effect that the child has not been immunized because of religious convictions or other objection to immunization; or a request signed by one parent or guardian that the local health department give the needed protective injections.

STUDY OF EXTERN SYSTEM URGED

A knotty issue for physicians and medical societies to deal with has been the employment of medical students as "externs" in hospitals. Hospitals have justified this practice by pointing out the benefits to the student. He learns more medicine by the experience and, in addition, there is often a substantial financial benefit. It has been emphasized that the hospital is benefited by the added personnel and resulting improved patient care.

The AMA Law Department has recently pointed out the existing dangers that are inherent in the extern system (J.A.M.A., April 4, 1966, p. 327). Briefly summarized, these risks involve either the student or the hospital and its staff. The student may not lawfully prescribe or administer treatment, nor can he be employed by any hospital for such a purpose. If the student does engage in diagnosis and therapy, he is subject to a charge of criminal offense of practicing medicine without a license.

The hospital faces the more direct risk of being charged with aiding and abetting the illegal practice of medicine. The physician responsible for the patient would likely face a similar charge with the consequent suspension or revocation of license.

In addition to the legal aspects, one should call attention to the inadequate supervision of the students by physicians in many of the hospitals where externs are used. The student's educational benefits are certainly limited if not completely jeopardized in such circumstances. The financial help for the medical student is not adequate justification for such practices.

Physicians, medical schools, hospitals and medical students are advised to re-examine present extern systems. If improvement in medical education can be shown to result for the physician in training, then the appropriate statutory changes should be instituted. If no benefit can be established, such employment of medical students must be eliminated.

THANKS, "GOLDIE"

The Michigan Department of Public Health and the entire population of Michigan suffered a real loss in the retirement of Doctor Goldie B. Corneliuson from the position of Chief of Maternal and Child Health. Her retirement became effective May 1.

During the many years that Doctor Corneliuson served the state, innumerable problems were solved or improved in the area of child health and maternal care. Standards were established for the hospital care of newborn infants, for hearing and vision screening of preschool and school age children, the development of rules for the implementation of the PKU law, improvement of facilities for the care of pregnancy and the stimulation of interest in the pathology of pregnancy.

More could be listed, but these were among those she took most pride in developing. Community child health programs were greatly expanded to the benefit of all of us in the state of Michigan.

MSMS recognized the contributions of Doctor Corneliuson by awarding her a Certificate of Commendation in 1964.

Doctor Corneliuson would be the first to point out that she relied heavily upon members of her staff and the appointed committees to make all of her accomplishments possible. This is all very true, but few people have the ability to motivate others as strongly as she did.

Gentle, soft-spoken and unendingly patient, she was the opposite of what most of us picture as the necessary type of individual to take command and force issues to satisfactory conclusions. Doctor Corneliuson commanded by virtue of her obvious dedication to duty that was as contagious as her ever present smile and cheerfulness.

Michigan has derived great benefit from this public servant and all of those who came into contact with her were better people from having had the experience.

We will miss you "Goldie." You have our deepest gratitude for a job well done and for being such a wonderful person while doing it.

WARNING

Milford O. Rouse, M.D., of Dallas, Texas, who is slated to become AMA president in 1967, has declared:

"The public itself, particularly the would-be beneficiaries of Medicare, will find that providing medical care through Social Security and other government channels will not be practical nor successful.

"We must make certain the medical profession does not become the whipping boy, when patients seek this care and discover they cannot have it because the agencies which would provide it simply do not exist or are inadequate."

in diarrhea

LOMOTIL® Tablets / Liquid

Each tablet and each 5 cc. of liquid contains:
diphenoxylate hydrochloride . . . . 2.5 mg.
(Warning: May be habit forming)
atropine sulfate . . . . 0.025 mg.

is a corker

Effectiveness: Lomotil possesses a unique degree of effectiveness in both acute and chronic diarrhea.

Convenience: Lomotil is supplied as small, easily carried, easily swallowed tablets and as a pleasant, fruit-flavored liquid.

Versatility: The therapeutic efficiency, safety and convenience of Lomotil may be used to advantage alone or as adjunctive therapy in diarrhea associated with:

- **Ulcerative colitis**
- **Acute infections**
- **Irritable bowel**
- **Regional enteritis**
- **Drug therapy**
- **Food Poisoning**
- **Functional hypermotility**
- **Malabsorption syndrome**
- **Ileostomy**
- **Gastroenteritis and colitis**

Dosage: For full therapeutic effect—Rx full therapeutic dosage. The recommended initial daily dosages, given in divided doses, until diarrhea is controlled, are:

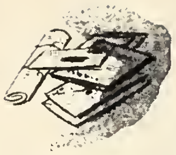
Children: 3 to 6 months — 3 mg. (½ tsp.* t.i.d.)
6 to 12 months — 4 mg. (½ tsp. q.i.d.)
1 to 2 years — 5 mg. (½ tsp. 5 times daily)
2 to 5 years — 6 mg. (1 tsp. t.i.d.)
5 to 8 years — 8 mg. (1 tsp. q.i.d.)
8 to 12 years —10 mg. (1 tsp. 5 times daily)
Adults: 20 mg. (2 tsp. 5 times daily or 2 tablets 4 times daily)
*Based on 4 cc. per teaspoonful.

Maintenance dosage may be as low as one-fourth the therapeutic dose.

Precautions: Lomotil, brand of diphenoxylate hydrochloride with atropine sulfate, is a Federally exempt narcotic preparation of very low addictive potential. Recommended dosages should not be exceeded. Lomotil should be used with caution in patients with impaired liver function and in patients taking addicting drugs or barbiturates. The subtherapeutic amount of atropine is added to discourage deliberate overdosage.

Side Effects: Side effects are relatively uncommon but among those reported are gastrointestinal irritation, sedation, dizziness, cutaneous manifestations, restlessness, insomnia, numbness of extremities, headache, blurring of vision, swelling of the gums, euphoria, depression and general malaise.

SEARLE *Research in the Service of Medicine*



Staff Provides Medicare Help

Your MSMS staff will be happy to assist you in resolving any problems you may have with the impending Medicare program.

The Social Security Administration recently announced that it would distribute a reference "handbook" for Medicare beneficiaries and a reference guide for physicians. The beneficiaries' handbook briefly outlines benefits under Parts A and B, which will be helpful in explaining most of the common medical services as well as enumerating exclusions.

The reference guide for physicians will be of general interest and of sufficient detail for the average physician to understand how the program operates. Direct mailing to physicians of this handbook will begin in early June.

Other Medicare publications available at Social Security offices now or in the near future are Conditions of Participation for Hospitals (HIM-1); Conditions of Participation for Home Health Agencies (HIM-2); Conditions of Participation for Extended Care Facilities (HIM-3); Conditions for Coverage of Services of Independent Laboratories (HIM-4); Principles of Reimbursement for Provider Costs (HIM-5); Questions and Answers about Psychiatric and Tuberculosis Hospitals (OASI-879); and Information for Providers of Services (OASI-1965-11).

Cites Safeguards

A Detroit newspaper recently reported an address given by Dr. Leon Bernstein, special consultant to the Bureau of Health Insurance, Social Security Administration. He spoke of the safeguards incorporated under Medicare, with particular reference to custodial care of elderly patients. Doctor Bernstein emphasized that hospital benefits are cut off after 90 days so as to provide a limit to hospital stays and discourage hospital use for purely custodial needs.

Extended care and home health services are intended only for persons who need skillful nursing or special services as part of continued treatment for an illness which required hospitalization. Doctor Bernstein continued, "They are not intended to cover custodial care, and it is the physician's responsibility to make the medical judgment as to whether or not the patient needs extended care."

Other safeguards include deductible features of individual policies and hospitalization review committees. An important aspect of this review would be to check whether an extended period of hospitalization was necessary.

Should the review committee conclude that continued hospital care is not medically necessary, the health insurance program will not pay for further care after the third day following the day the institution receives notice of such a finding.

Posthospital Care Payments Begin in '67

On July 1 those eligible under Medicare will be entitled to hospitalization. After a "spell of illness" of at least three days, the patient then may be transferred to a posthospital extended care facility. However, payments for posthospital extended care cannot begin until January 1967.

AMA informed MSMS that the Congressional House Ways and Means Committee recognized this gap and that it will not be changed in the foreseeable future. The reasons given were that the House Committee felt that hospitals were of acute concern and that hospitals should be developed before nursing home facilities.

No one can forsee the possible impact, and it has been suggested that MD's will have the added responsibility for determining the duration of hospitalization if no extended care facility is available.

* * *

A "spell of illness" is defined as commencing on the first day in which the individual is furnished covered inpatient or extended care services and ends with the last day of the first 60 consecutive days during which he was not an inpatient in a hospital or extended care facility.

* * *

At present federal Public Law 89-97 requires the physician to recertify each patient not later than the 20th day of care in the hospital. Discussions are under way which could result in a requirement that the physician recertify a hospitalized patient sooner than the 20th day with the possibility of the change being made prior to the starting date of the program. It is also reported that the Social Security Administration will analyze, by type of hospital and by geographic location, the recertification requirement to determine its effect on inpatient hospital stays.

Sees 11 Fears With Medicare

In an address about "Medicare, A Challenge to Hospital Public Relations," President Wm. S. McNary of Michigan Hospital outlined for a U-M Conference four aspects of Medicare "on the rosey side" and 11 problems on the challenge side.

His comments in part included:

Medicare will have a dramatic economic impact. For the most part this will be on the positive side.

1. Hospitals will be paid their reasonable costs for many cases heretofore discounted under welfare or written off as bad depts. This will also be true of physicians treating patients under the supplemental medical coverage (Part B) available with Medicare.

2. With the fear of economic hardship due to illness and hospitalization removed for those over 65, the general economy will receive a shot in the arm from those in this age category who may be less hesitant to purchase major appliances, home improvements, and the like.

3. People with elderly parents and relatives will have some of the economic pressure—brought on by illness and hospitalization—removed. Some of the expense of a terminal illness of a relative or parent will be spread across the broad social security tax base. Hopefully most of these Medicare eligibles will purchase Blue Cross - Blue Shield Complementary Coverage or indemnity insurance which will further relieve economic pressure of illness in this category

4. The "Golden Years" of retirement will generally be made more golden.

That's the rosy side. But let's turn to the bad side—those problems arising July 1—that will give every hospital severe operating problems and a public relations headache.

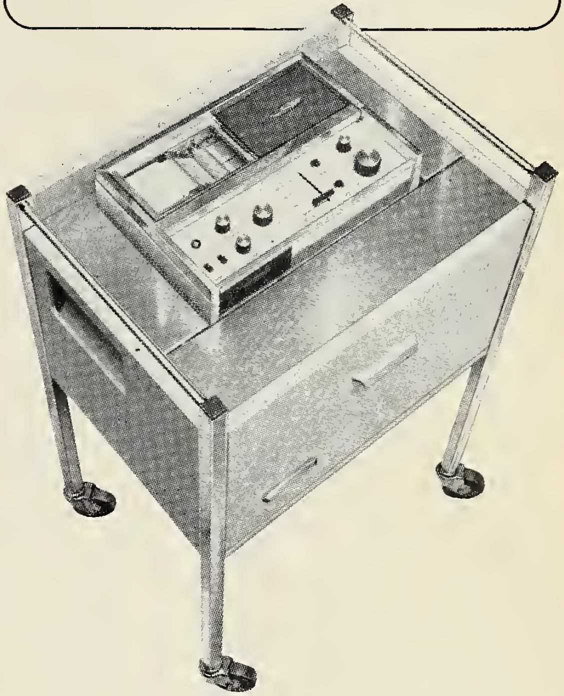
On July 1, the hospital public relations challenges will begin:

1. Actually, the challenge has already begun. Things are moving rapidly—too rapidly to anticipate all of the problems that will arise.

2. There will be a much greater demand for outpatient and diagnostic services—far greater than present space and personnel at some hospitals will be able to supply.

3. Mental health facilities are going to have to increase outpatient activity.

4. Many more mental health facilities will be required. This area of demand will be greatly compli-



The dramatically new
Burdick EK 4
Electrocardiograph

What
is a new
ECG?

Take a look at the Burdick EK 4! Many important improvements have been made in electrocardiographs in recent years — this is why we invite your closer inspection of the EK 4. Reliability, diagnostic accuracy, and freshness of design are apparent in every detail. Precise recordings of high fidelity ● Designed for use with auxiliary equipment, phone transmission, permanent recording of monitoring phenomena ● Fast switching from lead to lead ● 25-50 mm. speeds ● ½ x 1 x 2 standardization on all leads ● High frequency response permits use with PC-100 Heart Sound Preamp ● Stable ● Lightweight. If your present ECG can't offer you these up-to-date features, take a closer look at the EK 4. The EK 4 is a sound investment for your practice or department, and it's backed by Burdick dealer service. Write us. The Burdick Corporation, Milton, Wisconsin 53563.

THE G. A. INGRAM COMPANY
4444 Woodward Avenue, Detroit, Michigan 48201
Telephone: TEmple 2-4444

cated by the new auto benefits which become effective on September 1, 1966.

5. More people will be entitled to and will want semiprivate service. There will be complications caused by the Medicare definition of semiprivate which extends it to three or four bedrooms. The regular Michigan Blue Cross definition of semiprivate will still hold true for everything but Medicare. We may have to consider changing it.

6. There will be longer stays in the over 65 group.

7. Over 65 veterans may tend to stay home and use the local hospital if the VA hospital is located elsewhere.

8. The shortage of physicians and nurses will become more acute, especially if the Vietnam conflict continues to escalate and more US troops are committed. The nurse shortage problem will be intensified by any requirement for RN supervision at approved extended care facilities.

9. There will probably be a billing explanation problem in connection with the splitting of the charges for x-ray, pathology and anaesthesiology. This is almost totally unresolved and there is no use trying to untangle it here. I do want to express the hope that hospitals can work it out with their specialists so that present practices will be changed minimally.

10. There will be greater pressure for hospital-centered home care programs.

11. There will be an increased demand for rehabilitation services.

In his closing summary, Mr. McNary declared in part.

"In conclusion, I want to emphasize that we believe that public confidence in the voluntary system is on trial. If we can keep it, we have nothing to fear from the future. If we fail to merit this trust then we have failed our mission. We are entering a new era. If we meet it with imagination—if we are willing to change with the changing times—the voluntary system will emerge stronger than ever.

"We must bear in mind that—like it or not—the voluntary health care system will be on trial. Complaints about shortages of health facilities and personnel may be initially directed at government, but very probably will result in increased demand for government action to alleviate such shortages. We must do all we can to prevent the issuance of a blank check signed by John Q. Public in favor of Uncle Sam with instructions to Uncle Whiskers to take over and satisfy the demand."

LOOK Are **YOU** Protected?..

By the Comprehensive Group Insurance plans sponsored for its members by the Michigan State Medical Society? . . .

Life Insurance . . .

2 plans available including coverage for dependents

LONG TERM DISABILITY . . .

SPECIAL ACCIDENT . . .

Death & Dismemberment up to $100,000

PROFESSIONAL OVERHEAD EXPENSE . . .

Up to $1500 monthly

BEN P. STRATTON AGENCY, INC.
Administrators

P. O. Box 547
Lansing, Mich.
48093

Nitroglycerin
Belladonna
Paregoric
Codeine
Cortisone
Aspirin
Digitalis
Vitamins
Penicillin
Miltown®

An eminent role in medical practice

- Clinicians throughout the world consider meprobamate a therapeutic standard in the management of anxiety and tension.
- The high safety-efficacy ratio of 'Miltown' has been demonstrated by more than a decade of clinical use.

Miltown®
(meprobamate)

Indications: Meprobamate is effective in relief of anxiety and tension states. Also as adjunctive therapy when anxiety may be a causative or otherwise disturbing factor. Although not a hypnotic, meprobamate fosters normal sleep through both its anti-anxiety and muscle-relaxant properties.

Contraindications: Previous allergic or idiosyncratic reactions to meprobamate or meprobamate-containing drugs.

Precautions: Careful supervision of dose and amounts prescribed is advised. Consider possibility of dependence, particularly in patients with history of drug or alcohol addiction; withdraw gradually after use for weeks or months at excessive dosage. Abrupt withdrawal may precipitate recurrence of pre-existing symptoms, or withdrawal reactions including, rarely, epileptiform seizures. Should meprobamate cause drowsiness or visual disturbances, the dose should be reduced and operation of motor vehicles or machinery or other activity requiring alertness should be avoided if these symptoms are present. Effects of excessive alcohol may possibly be increased by meprobamate. Grand mal seizures may be precipitated in persons suffering from both grand and petit mal. Prescribe cautiously and in small quantities to patients with suicidal tendencies.

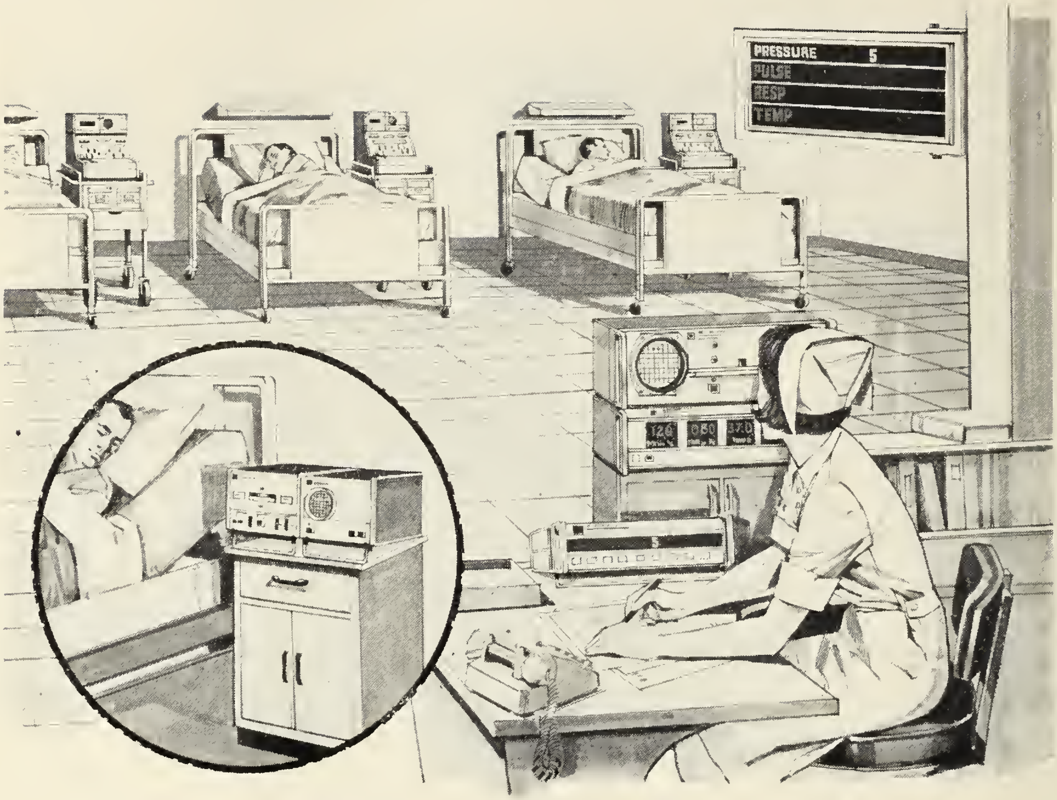
Side effects: Drowsiness may occur and, rarely, ataxia, usually controlled by decreasing the dose. Allergic or idiosyncratic reactions are rare, generally developing after one to four doses. Mild reactions are characterized by an urticarial or erythematous, maculopapular rash. Acute nonthrombocytopenic purpura with peripheral edema and fever, transient leukopenia, and a single case of fatal bullous dermatitis after administration of meprobamate and prednisolone have been reported. More severe and very rare cases of hypersensitivity may produce fever, chills, fainting spells, angioneurotic edema, bronchial spasms, hypotensive crises (1 fatal case), anuria, anaphylaxis, stomatitis and proctitis. Treatment should be symptomatic in such cases, and the drug should not be reinstituted. Isolated cases of agranulocytosis, thrombocytopenic purpura, and a single fatal instance of aplastic anemia have been reported, but only when other drugs known to elicit these conditions were given concomitantly. Fast EEG activity has been reported, usually after excessive meprobamate dosage. Suicidal attempts may produce lethargy, stupor, ataxia, coma, shock, vasomotor and respiratory collapse.

Usual adult dosage: One or two 400 mg. tablets three times daily. Doses above 2400 mg. daily are not recommended.

Supplied: 'Miltown' (meprobamate) is available in two strengths: 400 mg. scored tablets and 200 mg. coated tablets. 'Meprotabs' (meprobamate) is available as 400 mg. white, coated, unmarked tablets. *Before prescribing, consult package circular.*

WALLACE LABORATORIES
Cranbury, N.J.

CM-7814



START SMALL . . . . . . AND GROW

Sanborn's new Patient Monitoring Modules adapt perfectly to expanding intensive-care needs

Sanborn "Series 780" Patient Monitoring Systems alert the intensive-care staff *instantly* to the distress of any monitored patient, permitting more effective care of *all* patients by the available nurses.

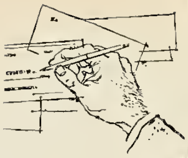
Design of the systems in functional modules offers greatest flexibility in adapting any monitoring system to future needs — the hospital system can begin modestly and grow steadily, with original modules fully utilized in the expanding system. Also, monitoring capabilities can be quickly shifted from bed to bed, as needed. Separate modules for heart rate (with integral pacer if desired), for temperature and respiration rate, and for systolic and diastolic pressures. Other modules for synchronized defibrillation, for resuscitative cardiac pacing, for oscilloscope display of cardiac or pulse waveforms, and for automatic pacing and ECG recording with any cardiac distress. Series 780 also includes remote alarm indicators (specific-parameter or general alarms, by bed) and remote patient-select push-button switchboxes for through-switching of patient signals to numerical display, oscilloscope, and/or chart recorders at the central station.

A complete range of transducers, recorders, and data displays engineered by Sanborn allows us to design, install, and fully warrant the complete system required for unexcelled patient care in your hospital.

For details, phone your local Hewlett-Packard/Sanborn office or write Sanborn Division, Waltham, Mass. 02154. In Europe, write Hewlett-Packard S.A., 54 Route des Acacias, Geneva, Switzerland.

HEWLETT
PACKARD hp SANBORN
DIVISION

Sanborn Division, 13136 Puritan Avenue, (313) 864-6336
Detroit, Michigan 48227



Town to Suburbs Shift Continues

(Excerpted from May "Business Conditions", published by the Federal Reserve Bank of Chicago).

Shoppers continue to shift their patronage from downtown and other retail stores within the large cities to competing outlets in the suburbs.

Data from the 1963 Census of Business released recently indicate that the decentralization of retailing shown by earlier postwar censuses continued during 1958-1963 in Seventh Federal Reserve District, which includes all of the lower peninsula of Michigan.

In a group of the larger metropolitan centers of the Seventh Federal Reserve District, stores in the central or core cities registered a dollar sales gain of only 4 per cent between 1958 and 1963—the same increase as between 1954 and 1958—while suburban sales jumped 46 per cent, compared with 31 per cent over the preceding four years. Total areawide sales climbed 13 per cent between 1954 and 1958 and went on to rise by 20 per cent in the five years following. By 1963, suburban stores in these Midwest centers accounted for 46¢ of the metropolitan area retail sales dollar, up from 38¢ in 1958 and 31¢ in 1954.

The declining role of retailing in the central cities has accompanied a variety of population and technological changes that have been especially pronounced since World War II. The proportion of metropolitan residents living within central cities has dropped below 50 per cent, from a level of 60 per cent in the late Forties, and this trend is expected to continue in the present decade. From the downtown retailer's point of view, potential customers are living farther away. This change in the distribution of metropolitan populations, with increasing density in the suburbs, has created a faster growing potential for merchants in outlying locations than for their older downtown rivals.

The shift in residence patterns has been more than a matter of numbers; the suburbs have attracted a disproportionate share of middle and upper-income families, leaving the cities more concentrated with families of lower income. Thus, the suburban stores have become more convenient to the consumers with most to spend, while city retailers have become more and more remote from this important class of customer.

In the last few years, many efforts have been made to revitalize the central cities. In virtually every major center, work has proceeded on the redevelopment of blighted areas situated in or close to the downtown business districts. Construction of attractive intown apartments, newly designed commercial and entertainment centers, shopping malls, expressways and mass transit improvements are projects that are widely expected to stem or even reverse the outward movement of population.

Health Expenditures Rise with Educational Level, Earning Power

A federal survey provides factual information about average expenditures for health care—and points out that total health expenses increase with the educational level of the family head and with the level of family income.

The average American had an annual health expense of $129 during 1962, data collected in the Department of HEW's Health Interview Survey shows, according to the National Association of Blue Shield Plans.

This expense increased directly with age, ranging from $61 for children under 6, to $208 for persons 65 and over.

Included as health expenditures were physician expense, hospital in-patient expense, medicine costs, dentist expense, and special or other medical expense such as eye glasses, speech therapy, wheel chairs, and emergency or out-patient treatment in a hospital or clinic.

Physician expense represented about one-third of the total health expenses in the population, and, regardless of sex and age, was invariably greater than any of the other four categories of health expense.

OPPOSE MORE MEDICARE

WASHINGTON, D.C.—Rep. Durward Hall, M.D., (R., Mo.) reported that a poll of his constituents showed them overwhelmingly against extending Medicare to persons of all ages. Of 13,760 persons replying to a questionnaire, 86.3 percent said "no" to the question: "Do you favor increasing Social Security taxes to finance a compulsory medical program for the entire population?" "Yes" answers totaled 11.2 per cent, and 2.5 per cent didn't answer the question.

Malpractice Suits Boost Premiums

The rising cost of malpractice suits throughout the nation is forcing a general increase in premiums for liability insurance for physicians and surgeons.

The National Bureau of Casualty Underwriters—the organization which determines premium rates for member and subscriber companies which together write a large volume of professional liability insurance—announced that as of June 1 average rate increases ranging from 10 to 30 per cent for physicians and surgeons liability will go into effect in 27 states.

The increases constitute the first major revision in three years, the NBCU said, and were made necessary by continued substantial underwriting losses.

The percentage increases, listed by state, are as follows:

Ariz.	30.0%	Mo.	15.0%
Ark.	10.0	Nebr.	30.0
Colo.	25.0	Nev.	30.0
Conn.	10.0	N. Mex.	30.0
Del.	15.0	N. Dak.	15.0
D. C.	13.3	Ohio	10.0
Hawaii	10.0	Oreg.	30.0
Idaho	10.0	S. Dak.	15.0
Ill.	10.0	Tex.	20.0
Ind.	10.0	Utah	25.0
Iowa	22.0	Vt.	10.0
Kans.	15.0	W. Va.	20.0
Mass.	30.0	Wyo.	10.0
Mich.	20.0		

In the five-year period from 1958 through 1962—the last years for which complete data are available—loss costs per insured physician and surgeon rose 40.8 per cent country-wide. In 1958 Bureau companies paid out a combined average of $99.63 in losses for each $100 insured. By 1962 that figure had risen to $140.35.

The National Bureau pointed out that during this same five-year period Bureau companies sustained large underwriting losses on liabiilty coverage for both physicians and surgeons. On the physician classes, losses and expenses amounted to $136 for each $100 in premiums during 1958-1962. This means that companies sustained a loss of $36 for each $100 of premium.

On the surgeons classes, losses and expenses totaled $125.20 for each $100 of premiums during the same period.

The NBCU said that in view of the extremely adverse experience in these lines, the June rate revisions must be described as "moderate."

Bamadex® Sequels®

Contraindications: In hyperexcitability and in agitated prepsychotic states. Previous allergic or idiosyncratic reactions.

Precautions: Use with caution in patients hypersensitive to sympathomimetic compounds, who have coronary or cardiovascular disease, or are severely hypertensive.

Dextro-amphetamine sulfate: Use by unstable individuals may result in psychological dependence.

Meprobamate: Careful supervision of dose and amounts prescribed is advised; especially for patients with known propensity for taking excessive quantities of drugs. Excessive and prolonged use in susceptible persons, e.g. alcoholics, former addicts, and other severe psychoneurotics, has been reported to result in dependence. Where excessive dosage has continued for weeks or months, reduce dosage gradually. Sudden withdrawal may precipitate recurrence of pre-existing symptoms such as anxiety, anorexia, or insomnia; or withdrawal reactions such as vomiting, ataxia, tremors, muscle twitching and, rarely, epileptiform seizures. Should meprobamate cause drowsiness or visual disturbances, reduce dose—operation of motor vehicles, machinery or other activity requiring alertness should be avoided. Effects of excessive alcohol consumption may be increased by meprobamate. Appropriate caution is recommended with patients prone to excessive drinking. In patients prone to both petit and grand mal epilepsy meprobamate may precipitate grand mal attacks. Prescribe cautiously and in small quantities to patients with suicidal tendencies.

Side Effects: Overstimulation of the central nervous system, jitteriness and insomnia or drowsiness.

Dextro-amphetamine sulfate: Insomnia, excitability, and increased motor activity are common and ordinarily mild side effects. Confusion, anxiety, aggressiveness, increased libido, and hallucinations have also been observed, especially in mentally ill patients. Rebound fatigue and depression may follow central stimulation. Other effects may include dry mouth, anorexia, nausea, vomiting, diarrhea, and increased cardiovascular reactivity.

Meprobamate: Drowsiness may occur and can be associated with ataxia, the symptom can usually be controlled by decreasing the dose, or by concomitant administration of central stimulants. Allergic or idiosyncratic reactions: maculopapular rash, acute nonthrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever, transient leukopenia. A case of fatal bullous dermatitis, following administration of meprobamate and prednisolone, has been reported. Hypersensitivity has produced fever, fainting spells, angioneurotic edema, bronchial spasms, hypotensive crises (1 fatal case), anuria, stomatitis, proctitis (1 case), anaphylaxis, agranulocytosis and thrombocytopenic purpura, and a fatal instance of aplastic anemia, but only when other drugs known to elicit these conditions were given concomitantly. Fast EEG activity, usually after excessive dosage. Impairment of visual accommodation. Massive overdosage may produce drowsiness, lethargy, stupor, ataxia, coma, shock, vasomotor, and respiratory collapse.

First aid for a button popper

BAMADEX
SEQUELS
Sustained Release Capsules

Second aid for a button popper

Bamadex® Sequels®

d-amphetamine sulfate (15 mg.)
and meprobamate (300 mg.)

Sustained Release Capsules

By providing combined anorexigenic-tranquilizing action, BAMADEX SEQUELS Capsules help your nonshrinking patients to establish new patterns of eating less. The amphetamine component suppresses the appetite, while the meprobamate helps allay nervousness and tension. And for most patients, the *sustained* release of the active ingredients makes possible convenient one-capsule-a-day dosage.

LEDERLE LABORATORIES • A Division of American Cyanamid Company, Pearl River, New York Lederle
6655

Americans Spending Less for MD Care

A study of figures recently released by the U. S. Department of Commerce reveals that Americans spent less in 1964 than in 1954 for physician services.

Following is a breakdown of the Health Care Dollar:

	1964	1954
Hospitals	30c	24c
Physicians	27c	28c
Drugs	17c	18c
Dentists	10c	12c
Health Insurance	7c	8c
Appliances	4c	5c
Other Services	5c	5c

Americans still spend more for tobacco than for hospital care, and more for cosmetics and haircuts than for doctor bills.

Spending for health care totaled $25.2 billion in 1965, according to figures of the U. S. Department of Commerce. That's an increase of 7.8 per cent from the $23.4 billion spent in 1963.

The total spent for hospital care in 1964 was $7.6 billion. This compares with $7.8 billion spent on tobacco products.

Twenty years ago, physicians received about 28 cents of every dollar spent on health care.

Expenditures for physicians' services totaled $6.8 billion in 1964, compared with $7 billion spent on personal items such as cosmetics, haircuts, and toiletries.

The Department of Commerce reported these expenditures for health care in 1964:

Hospitals, $7.6 billion, up 12.5 per cent over 1963; physicians, $6.8 billion, up 5.5 per cent over 1963; drugs, $4.4 billion, up 5.2 per cent; dentists, $2.4 billion, up 5.8 per cent; health insurance, $1.8 billion, up 6.3 per cent; appliances, $1.1 billion, up 9.7 per cent; and other services, $1.2 billion, up 6.9 per cent over 1963.

"... if the United States were to succumb to mass beatnikery, the great American customer would disappear, the factories would shut down, the gross national product would shrivel, public welfare would fall off for lack of tax funds, the colleges would close for want of endowments, science would shrivel without money for experiment, our Army and Air Force would be stuck with obsolescent weapons, and the whole blooming American system would go down the drain."

—John Chamberlain
Newspaper Columnist

For prompt, emphatic diuresis

aquaTaG®
(BENZTHIAZIDE)

NEW FROM TUTAG for prompt, comfortable diuretic action with a balanced excretion of sodium chloride and a lower potassium loss under normal dosage and diet regimen

DIURETIC ACTION: Clinically, the oral administration of AQUATAG (benzthiazide) results in diuretic activity within two hours with maximal natriuretic, chloruretic, and diuretic effects occurring during the fourth, fifth and sixth hours. Maintenance of response continues for approximately 12 to 18 hours. Acidosis is an unlikely complication since therapeutic doses of AQUATAG (benzthiazide) do not appreciably increase bicarbonate excretion. Edematous patients receiving 50 mg. of AQUATAG (benzthiazide) daily for five days developed a maximal increase in the rate of sodium excretion on the first day, and maintained this high rate until depletion of excessive body stores of sodium.

In congestive heart-failure patients, AQUATAG (benzthiazide) produced the same weight loss, during a 48-hour treatment period as did a maximally effective dose of hydrochlorothiazide.

DOSAGE: Diuresis, initially 50 to 200 mg.; maintenance 25 to 150 mg., daily. Hypertension 50 to 100 mg. initially, adjusted to 50 mg. t.i.d. or downward to minimal effective dosage level.

PRECAUTIONS AND SIDE EFFECTS: Electrolyte imbalance with hypokalemia, hypochloremic alkalosis and hyponatremia may occur. Other reactions may include blood dyscrasias, hyperuricemia and gout, nausea, jaundice, anorexia, vomiting, diarrhea, dizziness, paresthesia, photosensitivity and headache. Insulin requirements may be altered in diabetes.

WARNINGS: Dosage of coadministered antihypertensive agents should be reduced by at least 50%. Use with caution in edema due to renal disease; advanced hepatic disease or suspected presence of electrolyte imbalance. Stenosis or ulcer of small intestine have been reported with coated potassium formulas and should be administered only when indicated. Until further clinical experience is obtained, the use of the drug in pregnant patients should be carefully weighed against possible hazards to the fetus.

CONTRAINDICATIONS: AQUATAG (benzthiazide) is contraindicated in progressive renal disease or disfunction including increasing oliguria and azotemia. Continued administration of this drug is contraindicated in patients who show no response to its diuretic or antihypertensive properties.

Before prescribing or administering, read the package insert or file card available on request.

Available as 25 or 50 mg. scored tablets.

Request clinical samples and literature on your letterhead.

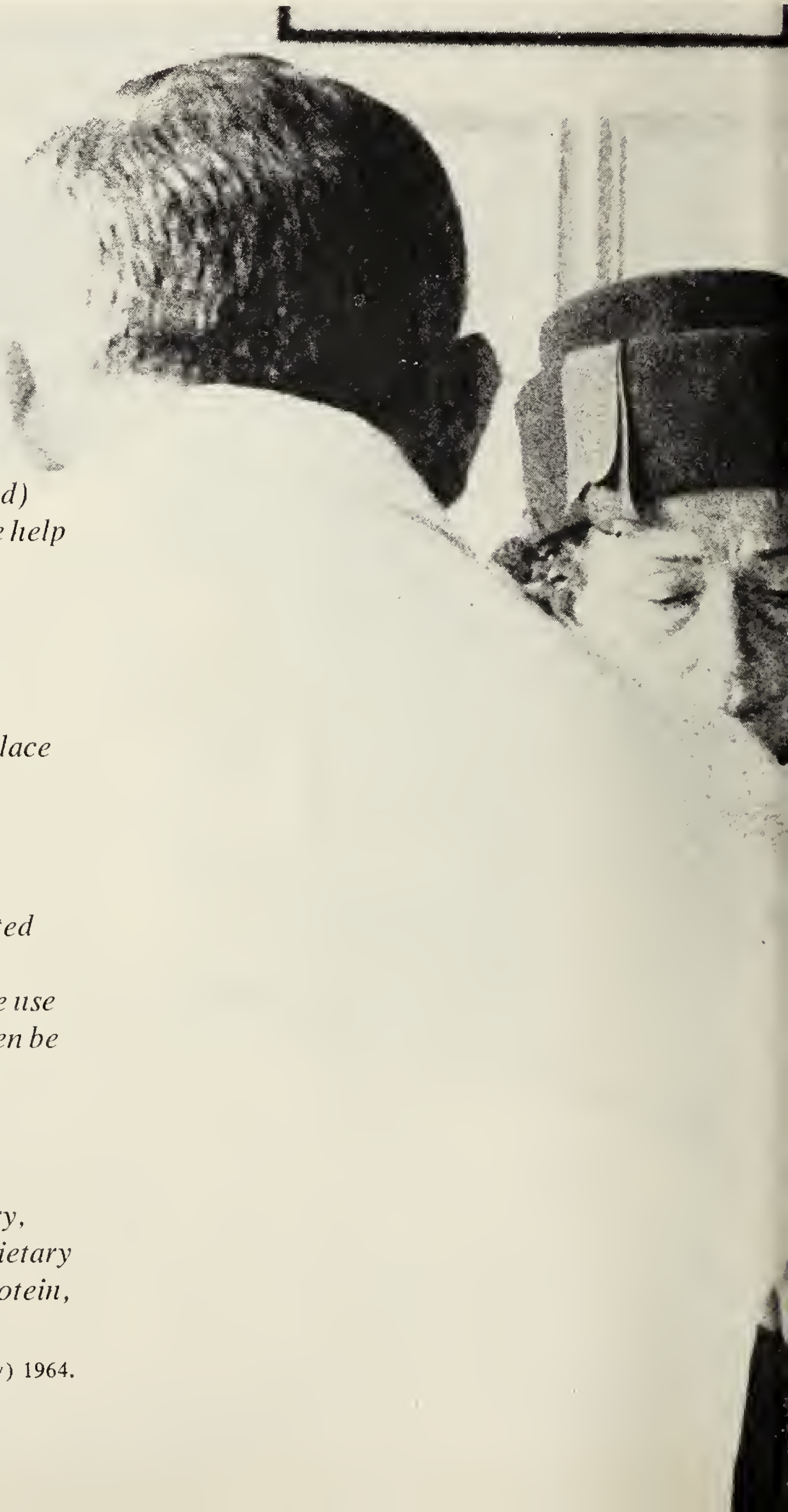
S.J.TUTAG
& COMPANY
Detroit, Michigan 48234

The Mediatric Age:

There is a growing senescent body of people who —either from lack of motivation, or as a result of surgery, trauma, or extended illness—are on their way to malignant inactivity…

The Mediatric Age:

Unfortunately, there is no cure. But there are, largely through your own interest and direction, ways to help them back to a more active and useful life. There are medicines, too, designed to help. One such has proved useful in clinical practice:



"A steroid-nutritional compound (Mediatric) was used in 100 patients to relieve some of the symptoms caused by degenerative changes of aging . . . This therapy resulted in improvement of 75 per cent of the patients . . ."

McNeill, A. J.: Clin. Med. *8*:518 (Mar.) 1961.

"Mediatric (steroid-nutritional compound) capsules, one a day, seem to give definite help to debilitated patients."

Arnold, E. T., Jr.: Geriatrics *12*:612 (Oct.) 1957.

"Nutritional and hormone bolstering of function in the aged may have a useful place in geriatrics."

Morgan, A. F.: Gerontologist *2*:77 (June) 1962.

"In diets which for any reason are restricted in calories, enough of these substances (B vitamins) may not be supplied . . . The use of B and C vitamin supplements may then be justified and indeed may be necessary."

Morgan, A. F.: Gerontologist *2*:77 (June) 1962.

"Intensive nutritional therapy is necessary, especially in elderly people, to correct dietary deficiencies created by large losses of protein, vitamins and other nutrients."

Riccitelli, M. L.: J. Am. Geriatrics Soc. *12*:489 (May) 1964.

Mediatric®

Designed for the "metabolically spent"

Nutritional reinforcement for those who can't – or won't – eat properly...balanced amounts of estrogen and androgen to counteract declining gonadal hormone secretion and its sequelae of premature degenerative changes...mild antidepressant for a gentle "mood" uplift...

The estrogen component in MEDIATRIC is PREMARIN® (conjugated estrogens—equine), the natural estrogen most widely prescribed for its superior physiologic and metabolic benefits.

MEDIATRIC also provides *nutritional reinforcement—blood-building factors and vitamin supplementation*. It contributes a *gentle "mood" uplift* through methamphetamine HCl.

Three different dosage forms—Liquid, Tablets, and Capsules—offer convenience and variety.

MEDIATRIC Liquid

Each 15 cc. (3 teaspoonfuls) contains:

*Conjugated estrogens—equine (Premarin®)	0.25 mg.
Methyltestosterone	2.5 mg.
Thiamine HCl	5.0 mg.
Cyanocobalamin	1.5 mcg.
Methamphetamine HCl	1.0 mg.

Contains 15% alcohol

MEDIATRIC Tablets and Capsules

Each MEDIATRIC Tablet or Capsule contains:

*Conjugated estrogens—equine (Premarin®)	0.25 mg.
Methyltestosterone	2.5 mg.
Ascorbic acid	100.0 mg.
Cyanocobalamin	2.5 mcg.
Intrinsic factor concentrate	8.0 mg.
Thiamine mononitrate	10.0 mg.
Riboflavin	5.0 mg.
Niacinamide	50.0 mg.
Pyridoxine HCl	3.0 mg.
Calc. pantothenate	20.0 mg.
Ferrous sulfate exsic.	30.0 mg.
Methamphetamine HCl	1.0 mg.

*Orally active, water-soluble conjugated estrogens derived from pregnant mares' urine and standardized in terms of the weight of active, water-soluble estrogen content.

MEDIATRIC helps keep the older patient alert and active; helps relieve general malaise, easy fatigability, vague pains in the bones and joints, loss of appetite, and lack of interest usually associated with declining gonadal hormone secretion.

CONTRAINDICATION: Carcinoma of the prostate, due to methyltestosterone component.

WARNING: Some patients with pernicious anemia may not respond to treatment with the Tablets or Capsules, nor is cessation of response predictable. Periodic examinations and laboratory studies of pernicious anemia patients are essential and recommended.

SIDE EFFECTS: In addition to withdrawal bleeding, breast tenderness or hirsutism may occur.

SUGGESTED DOSAGES: *Male and female:* 3 teaspoonfuls of Liquid, 1 Tablet, or 1 Capsule, daily or as required.

In the female: To avoid continuous stimulation of breast and uterus, cyclic therapy is recommended (3 week regimen with 1 week rest period—Withdrawal bleeding may occur during this 1 week rest period).

In the male: A careful check should be made on the status of the prostate gland when therapy is given for protracted intervals.

SUPPLIED: No. 910 – MEDIATRIC Liquid, in bottles of 16 fluidounces and 1 gallon. No. 752 – MEDIATRIC Tablets, in bottles of 100 and 1,000. No. 252 – MEDIATRIC Capsules, in bottles of 30, 100, and 1,000.

MEDIATRIC
LIQUID
MEDIATRIC
TABLETS

Mediatric®

steroid-nutritional compound

Ayerst®

AYERST LABORATORIES, NEW YORK, N.Y. 10017 • Montreal, Canada

6636

Wellman Now Leads MMS

John M. Wellman, M.D., Lansing, is serving now as the seventh president of Michigan Medical Service. Doctor Wellman was elected at the May board meeting to succeed Sidney Adler, M.D., Detroit. Doctor Wellman was a member of the Blue Shield Board from 1955 until 1962. A past president of the Ingham County Medical Society in 1956, he served as a delegate to MSMS House of Delegates 1951-63.

Doctor Adler, president since 1961, resigned recently because of increasing pressures of private practice. He will continue to serve on the Blue Shield Board.

Doctor Wellman, a graduate of University of Michigan Medical School, served as an instructor in surgery at the U-M Medical School while pursuing postgraduate training. During World War II, he became a Colonel in the U. S. Army Medical Corps as Chief of Surgery at Lawson General Hospital in Atlanta, Ga.

Doctor Wellman becomes the seventh president of Blue Shield. The first president, July, 1941, to September, 1942, was Henry R. Carstens, M.D., Detroit; followed by Robert L. Novy, M.D., Detroit, from September, 1942, to September, 1955; Wilfred Haughey, M.D., Battle Creek, October, 1955, to October, 1956; L. Fernald Foster, M.D., Bay City, October, 1956, until his death in May, 1959; G. Thomas McKean, M.D., Detroit, June, 1959, to October, 1961, and then Doctor Adler. Doctor Novy was elected President Emeritus on September 7, 1955.

Dr. Ross Continues To Lead Writers

C. Howard Ross, M.D., Ann Arbor, continues for another year as president of the Michigan Chapter of the American Medical Writers.

The other leaders include Charles W. Sellers, M.D., Detroit, secretary; and V. K. Volk, M.D., Saginaw, vice president.

The writers had their annual meeting this spring in Detroit.

Rowe Leads State Diabetes Association

The Michigan Diabetes Association, at its annual dinner meeting at Henry Ford Hospital, heard Thaddeus S. Danowski, M.D., guest speaker, discuss "Weighty Problems in Diabetes." Doctor Danowski is Professor of Medicine at the University of Pittsburgh.

The new president, John B. Rowe, M.D., Flint, was installed. He is shown above on the left. In the center is Doctor Danowski, and on the right is John B. Bryan, M.D., Detroit, outgoing president.

New ACP Fellows

Eighteen Michigan physicians were among those recently honored at the 47th Annual Session of the American College of Physicians (ACP). They were inducted into Fellowship in the 13,000-member society.

Inducted were: Doctors Howard Eddy, Adrian; Lee E. Batholomew, James T. Cassidy, Rhoda M. Powsner and George R. Thompson, Ann Arbor; James Beard and Frederick Talmers, Dearborn; Thomas A. Bruce, James L. Gilreath, Harry A. Kashtan and Irwin J. Schatz, Detroit; Ramon R. Joseph, Eloise; William P. Smith, Grosse Pointe; Warren G. White, Jr., Muskegon; Eugene S. Austin, Owosso; Robert McKnight, Petoskey; James M. Colville, Royal Oak; Leonard C. Alexander, Southfield.

Recall 43 Years Ago

The only living founders of the Academy of Surgery of Detroit—Ira G. Downer, M.D., and Charles Kennedy, M.D.—attended the recent annual meeting. Both are past presidents of the society which they helped start in 1923. Installed as the new president was William S. Carpenter, M.D.

260
250
240
230
220
210
200
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
10
0
Baumanometer

when readings indicate hypertension

Time for Naturetin®

SQUIBB BENDROFLUMETHIAZIDE

to reduce blood pressure

In the management of your hypertensive patients, Naturetin is good therapy to start with, good therapy to stay with.

In mild hypertension, Naturetin lowers blood pressure gradually toward normotensive levels. In long-term therapy, Naturetin may keep blood pressure low—for months, sometimes years. When used in combination with other antihypertensive agents, blood pressure often falls further—and lower doses of both drugs are usually possible.

Clinical trials have proven Naturetin effective—without serious side effects.[1,2] And, when used to treat patients with cardiac edema and hypertension, "in no instance did the concentration of serum potassium fall below 3.1 mEq. per liter."[3] (Normal range for serum potassium: 3.5-5.0 mEq./liter).[4]

When readings indicate hypertension, start with Naturetin, stay with Naturetin.

Contraindications: Severe renal impairment; previous hypersensitivity.

Warning: Ulcerative small bowel lesions have occurred with potassium-containing thiazide preparations or with enteric-coated potassium salts supplementally. Stop medication if abdominal pain, distension, nausea, vomiting, or G.I. bleeding occur.

Precautions: The dosage of ganglionic blocking agents, veratrum, or hydralazine when used concomitantly must be reduced by at least 50% to avoid orthostatic hypotension. Electrolyte disturbances are possible in cirrhotic or digitalized patients.

Side Effects: Bendroflumethiazide may cause increases in serum uric acid, unmask diabetes, increase glycemia and glycosuria in diabetic patients and may cause hypochloremic alkalosis, hypokalemia; cramps, pruritus, paresthesias, and rashes may occur.

Supplied: Naturetin (Squibb Bendroflumethiazide) 5 mg. and 2.5 mg. tablets. Also available—Naturetin c̄ K [Squibb Bendroflumethiazide (5 or 2.5 mg.) with Potassium Chloride (500 mg.)]. For full information, see Product Brief.

References: 1. Telfeyan, S. A.: Clin. Med. *70*:1668, 1963. 2. Shepard, H. L.: J. Am. Geriatrics Soc. *11*:363, 1963. 3. Cummings, D. E.; Goodman, R. M., and Steigmann, F.: J. Am. Geriatrics Soc. *12*:161, 1964. 4. Castleman, B., ed.: New England J. Med. *268*:1462, 1963.

SQUIBB Squibb Quality
—the Priceless Ingredient

The most significant advance in analgesics since the isolation of morphine in 1805

Remarkable effectiveness and greater freedom from side reactions in the widest range of clinical applications

FOR PAIN

NUMORPHAN®

BRAND OF OXYMORPHONE, ENDO

A NEW ERA IN PAIN RELIEF

clinically tested for 5 years/evaluated in 120 U. S. hospitals/over a quarter of a million doses given/ more than 25,000 patients treated

SUPPLIED:
Vials: 10 cc., singly and in boxes of three.
Ampuls: 1 cc. and 2 cc., in boxes of 12 and 100.
(Each cc. of NUMORPHAN* contains 1.5 mg. oxymorphone as the hydrochloride.)
Suppositories: 2 mg. and 5 mg., in boxes of 6.

THE G. A. INGRAM COMPANY
4444 Woodward Avenue, Detroit, Michigan 48201
Telephone: TEmple 2-4444

*U S Pat 2,806,033.

AMA-NEA Resolution Deals with Reading

The Joint Committee on Health Problems in Education of the AMA and the National Education Association adopted five resolutions. The resolutions concerned teen-age smoking, school health legislation, legislative guidelines, pressures and educators and educational research.

The resolution on pressures pointed to overcrowde classrooms and other heavy loads and recommended that school boards "establish policies to lighten teacher loads and size" and to provide time to prepar class plans, etc.

The resolution, "Need for Control in Educational Research," may be of interest to MSMS members. It follows:

"*Whereas*, in recent years new techniques hav been promoted which are alleged to be highly successful in teaching reading to brain-damaged children and to other slow readers, and

"*Whereas*, such techniques are being promote chiefly on the basis of individual case histories an testimonials which often neglect to make referenc to control groups and to report the proportion o children in which such techniques are of little or n value, therefore be it

"*Resolved* that funds for research in child development be sought to support a carefully planne study to evaluate new techniques in teaching reading, and be it further

"*Resolved* that until the results of such scientifically controlled research are available, it is suggeste that education and health agencies not adopt unproven methods of teaching reading."

WSU Medical School Names Regional Reps

Twenty-three Michigan doctors are among alumn of the Wayne State University School of Medicin who have been named regional representatives fo the school's Alumni Association.

The Michigan doctors appointed are: Jack Parke Bentley, M.D., Jackson; William H. Bond, M.D Muskegon; Henry Cook, M.D., Flint; Kenneth L Crawford, M.D., Kalamazoo; Curtis D. Edhol M.D., Grand Rapids; Alexander B. Gwinn, M.D Hastings; Louis F. Hayes, M.D., Gaylord; Benjami

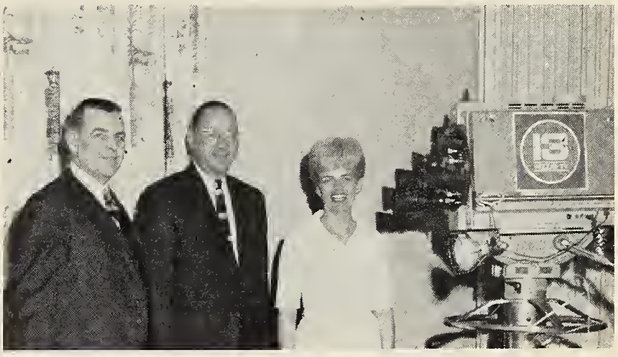
B. Holder, M.D., Midland; Henry J. Klos, M.D., St. Joseph; Donald A. Koch, M.D., Port Huron; Lester C. Kraft, M.D., Leslie; Warren Lambert, M.D., Marquette; Walter E. Larson, M.D., Cheboygan, Michigan; Edgar C. Long, M.D., Monroe; Leo J. Miedler, M.D., Ann Arbor; John G. Milliken, M.D., Traverse City; Benjamin T. Montgomery, M.D., Sault Ste. Marie; Albert P. Murphy, M.D., Saginaw; John D. Pool, M.D., Kalamazoo; Edward H. Rodda, M.D., Bay City; James E. Spens, M.D., Alpena; William D. Walters, M.D., Battle Creek; William C. Wyte, M.D., Mt. Clemens.

Mercywood Hospital Hosts Law Officers

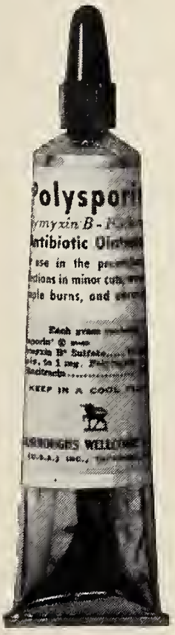
Mercywood Hospital, Ann Arbor, signaled National Hospital Week by hosting a luncheon for the chief law enforcement officers of Washtenaw, Oakland, Livingston, Jackson and Monroe Counties. Leonard Himler, M.D., Chief of Staff, detailed Mercywood's handling of the area's mental health problems, giving special emphasis to the increase in the emotional problems experienced by the adolescent part of our rapidly expanding community and its effect on law enforcement agencies.

ON PLANNING COMMITTEE

The West Central Regional Health Facilities Planning Council's Technical Advisory Committee has appointed the following physician members to that body: Frederick Gillette, M.D., Grand Rapids; J. Max Busard, M.D., Muskegon; Glen House, M.D., Greenville.



Charles W. Aldridge, M.D., Center, of Grand Rapids, discussed recently the "Medical Needs of the Expectant Mother" over WZZM-TV. Shirley Clark was the moderator. At left is J. A. Doherty, executive director of the Michigan Health Council, which arranged for a series of TV discussions on prenatal education.



in treating topical infections, no need to sensitize the patient

USE 'POLYSPORIN'® brand
POLYMYXIN B-BACITRACIN
ANTIBIOTIC OINTMENT

broad-spectrum antibiotic therapy with minimum risk of sensitization

Caution: As with other antibiotic products, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs. **Contraindication:** This product is contraindicated in those individuals who have shown hypersensitivity to any of its components.
Supplied: In ½ oz. and 1 oz. tubes
Complete literature available on request from Professional Services Dept. PML.

BURROUGHS WELLCOME & CO. (U.S.A.) INC., Tuckahoe, N.Y.

Variances Listed By AAMC Official

"Most variance among student bodies in medical schools could be ascribed to ability levels, faculty-student ratios, size of school budgets, and students' perceptions of their schools," stated Doctor Paul J. Sanazaro, Director of Research and Education, Association of American Medical Colleges at the first of a series of Wayne State University faculty conferences on medical education. The meetings are sponsored by the Curriculum Study Committee of the School of Medicine.

"Student social, economic and family backgrounds; attitudes, values, interests and motivation; physical settings of school and hospital, and clinical experience all appeared to have some influence as contributing factors in the variance among student bodies at different medical schools," Doctor Sanazaro said.

"The effect of class size was also studied and correlations were essentially nonsignificant except for 'general esteem' which was negative and significant, suggesting that students who are members of large classes tend to have a negative attitude toward their schools and faculty," he said.

In his presentation to the faculty, Doctor Sanazaro described the objective findings derived from longitudinal studies of medical students followed from the time they entered medical school to graduation.

(The above is quoted from the WSU School of Medicine Newsletter.)

CHOICE MEDICAL OPPORTUNITIES with a growing INTERNATIONAL PHARMACEUTICAL ORGANIZATION

In addition to liberal company benefits these positions offer suburban living at its best in convenient North Jersey, just 30 miles from N.Y.C. served by fine schools and close to all recreational and educational facilities.

Send resume and salary/requirements in confidence, to

Box #21, 120 W. Saginaw
Street, East Lansing,
Michigan 48824

Immediate opportunities for MD's now exist in the following areas.

- MEDICAL SERVICE

Involves liaison with pharmacology - clinical research, government agencies and the advertising-marketing departments involved in the preparation of medical literature and review of advertising material. (Travel) limited to U. S. 30% of the time.

- CLINICAL RESEARCH

Position of responsibility involves establishing and supervising the clinical trials of new drugs, analysis of results and preparation of reports. (Travel) within the U.S. 20% of the time.

Tells What Lures People to Meetings

Why do people attend meetings?

That question has been asked by many people and many groups many times.

Recently, the Opinion Research Corporation conducted a survey on this question, vital to MSMS and its component societies.

The survey, conducted by the Chamber of Commerce of the USA among associations found that:

Four of the main reasons given by members for attending association conventions and meetings were:

- Exchange of ideas, discussions of problems
- Education, information
- New trends, ideas, and methods
- Personal contacts, fellowship

The study notes that although other reasons are not mentioned more frequently by members, this does not mean that they are not considered good reasons for attending.

Virtually all members who have attended conventions and meetings said that they were well worth the cost.

Over half of the business and professional men said that they went to three or more meetings in a 12-month period. Members of professional associations showed a somewhat higher rate of attendance than businessmen.

Folsom Urges Hospital Use Manpower Wiser

Marion B. Folsom, former Secretary of Health, Education and Welfare, told the 1966 National Health Forum that the failure of hospitals to make full use of their personnel was one of the greatest shortcomings encountered in a two and one-half year study of community health services in America.

Mr. Folsom, now chairman of the National Commission on Community Health Services said, "We found that the hospitals not only are failing to fully utilize physicians and nurses available on their staffs, but are doing little to recruit part-time nurses and doctors to ease their staffing problems."

Mr. Folsom suggested that "hospitals could do better in the field of utilization of manpower."

Local Mental Health Boards Begin Service

The Department of Mental Health's community Services Division reports that three more Act 54 boards—for Kent, Mason and Saginaw counties—have been appointed by county boards of supervisors, making a total of 24 local community mental health services programs.

This makes a total of six counties which have elected to come under provisions of the Act this year. Branch, Livingston and Menominee counties began their participation in February.

Today, approximately 85 per cent of the state's population resides in counties with Act 54 boards.

Robert A. Kimmich, M.D., director of the Department of Mental Health, points out that as a result of Act 54 participation many communities have services available to them today which were not available only a few short months ago.

Shiawassee County, one of the first counties to have a plan approved by the Department of Mental Health, now has a new Family Medical Health Center. The staff includes a psychiatrist, psychologist and psychiatric social worker. They have concentrated on consultative work with other community agencies and expect to provide day care services for the emotionally disturbed next year.

Baraga, Keweenaw, Houghton and Ontonagon counties joined to form the Copper Country Mental Health Board. Under the board's plan a merger was effected between the Houghton branch child guidance clinic and Rice Memorial Clinic, Houghton. As a result of the merger, better utilization of staff is possible and more people are being served. Further expansion of services for the four counties is expected.

In Detroit, the relocation of the Detroit Receiving Hospital's department of psychiatry to new quarters at Herman Kiefer Hospital has made possible considerable improvement in patient care. Development of new psychiatric programs, including a children's psychiatric inpatient service, is now under way.

Dr. Tallant to Edit Detroit Medical News

The Wayne County Medical Society has appointed Edward J. Tallant, M.D., MSMS Councilor, as editor of the weekly *Detroit Medical News.*

The WCMS Board of Trustees has elected Don W. McLean, M.D., MSMS Councilor, as Chairman; Ralph R. Cooper, M.D., MSMS Councilor, House Chairman, and Homer A. Howes, M.D., as Treasurer.

John G. Graham, M.D., and F. P. Rhoades, M.D., were reappointed to the Wayne County Health Foundation.

TELL THEM THANKS

Firms advertising in Michigan Medicine, the official journal of your state association, deserve your good will and your all-around support. They help make this publication possible.

See index to advertisers on page 595.

This photo of medical technologists at work is one of many in the new AMA pocket book "Horizons Unlimited," which is a medical careers handbook. MSMS worked with the AMA to insert eight pages of information about the health career opportunities in Michigan and ordered 10,000 copies for distribution to schools, libraries, etc. In Michigan, there are 51 universities, colleges, community colleges and hospitals which train medical technologists. (AMA Photo)

CLINICAL INVESTIGATORS

Unique opportunity for stimulating career in growing pharmaceutical company for physicians to design and monitor clinical trials of pharmaceuticals and biologics. Work also includes medical guidance for management.

DOW

Pediatric or internal medicine background; research or teaching experience helpful. Provides opportunity to maintain hospital affiliation. Some travel. Salary dependent upon qualification and experience.

Send detailed resume in full confidence to:
J. T. Anderson, M.D., Medical Director

PITMAN-MOORE DIVISION
THE DOW
CHEMICAL COMPANY
P.O. Box 1656, Indianapolis, Indiana 46206
An equal opportunity employer

AMA-ERF Loan Fund Grows; Michigan Loans Increase

More than 10,000 physicians of the nation gave to the AMA-ERF Loan program in 1965. Many gave for the first time. The Woman's Auxiliaries throughout the country again contributed a significant sum through benefits and special fund raising events.

Industry support was paced again by a $100,000 gift from Merck, Sharp & Dohme, its fourth annual contribution of this amount. Other companies renewing their support included Chas. Pfizer & Co., $50,000, and Abbott Laboratories, G. D. Searle & Co., The Upjohn Company, Eli Lilly & Company and The Prudential Insurance Company of America, $25,000 each.

A total of 114 companies, foundations, organizations and individuals now have given $1,000 or more to the Loan Program. Of these major contributors, 10 gave for the first time in 1965. Notable among the new gifts was a $24,949 contribution from the Central Medical Society of Jackson, Mississippi, representing surplus funds from its Sabin Polio Vaccine Program.

LOANS, BY STATE OF TRAINING (Selected Examples)

	1964		1965	
State	No. Loans	Principal Amt.	No. Loans	Principal Amt.
Illinois	256	$276,100	272	$295,600
Indiana	278	325,700	292	345,800
Michigan	190	223,300	218	265,000
Minnesota	187	220,700	205	243,700
Ohio	281	313,000	312	342,600

SINAI TO EXPAND

A multimillion dollar expansion of psychiatric facilities at Sinai Hospital is planned to serve the northwest area of Detroit as part of the community mental health program for children and adults.

The expansion will be financed in part by state and federal funds.

SPEAK AT OAKLAND U.

Three MSMS members spoke at the "Conference for Widows and Divorcees" at Oakland University recently. Ralph S. Green, M.D., Rochester, discussed "The Healing Process Begins"; Harry A. Pearse, M.D., Detroit, discussed "Nutrition and Health"; and James McHugh, M.D., Southfield, "Creating a New Future with Children."

BRIGHTON HOSPITAL

A non-profit foundation

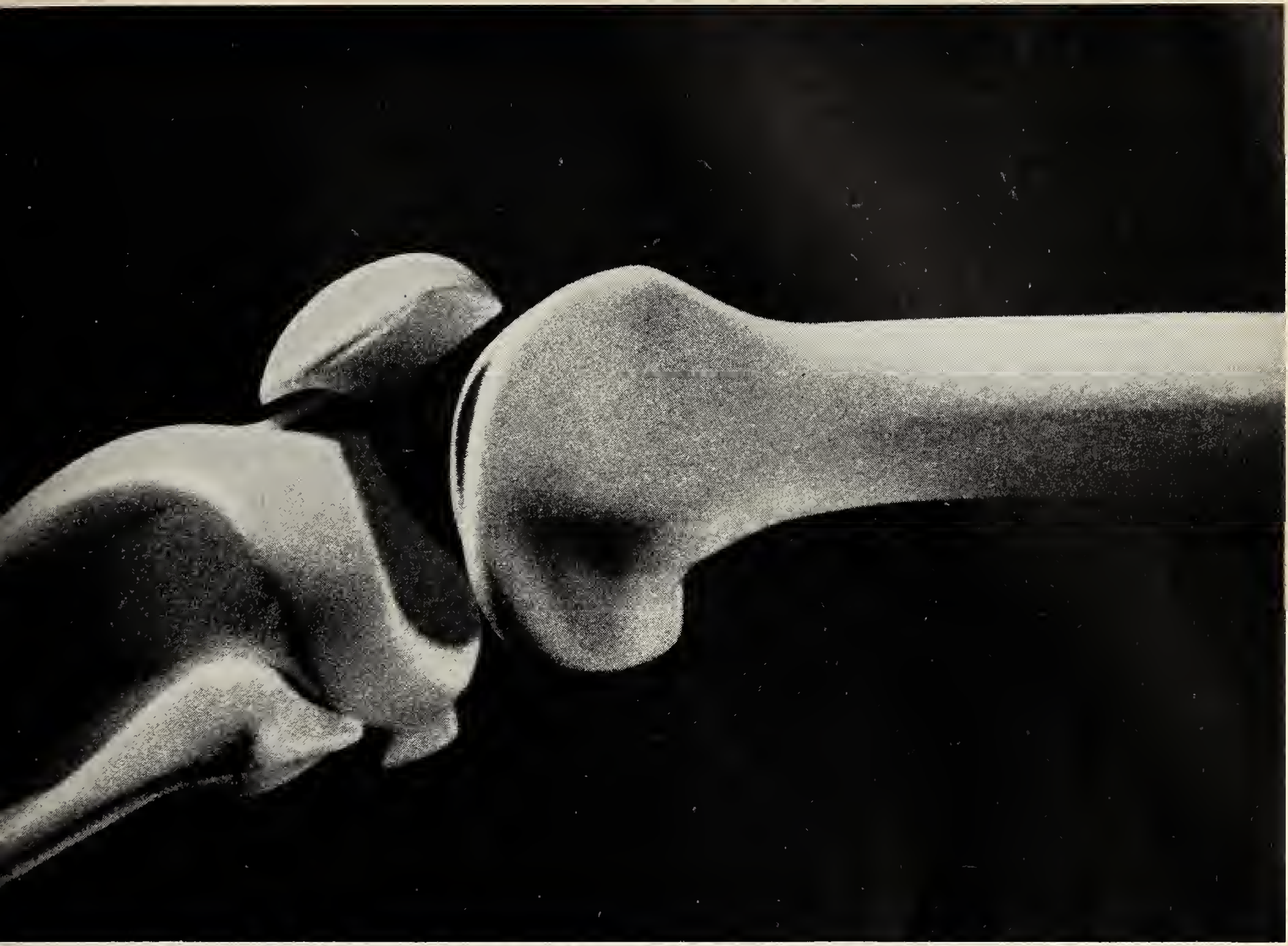
FOR ALCOHOLISM

Member, Michigan Hospital Association

A facility designed to rehabilitate and aid the compulsive drinker in arresting his addiction.

Brighton Hospital meets the standards established by the Michigan State Board of Alcoholism and is recommended by that Board.

12851 East Grand River
One block south of I-96 at Kensington Rd. Exit
Four miles east of U. S. 23
Brighton, Michigan
ACademy 7-1211



3utazolidin® alka

ienylbutazone	100 mg.
ied aluminum droxide gel	100 mg.
agnesium trisilicate	150 mg.
matropine ethylbromide	1.25 mg.

Usually works within 3 to 4 days in osteoarthritis

ie trial period need not exceed 1 week. In ntrast, the recommended trial period for domethacin is at *least 1 month.*

iat's why it's logical to start therapy with utazolidin alka—you'll know quickly whether not it works. And usually, it will.

large number of investigators have re- orted major improvement in about 75% of ises. Some patients have gone into remis- on. Relief of stiffness and pain may be fol- wed quickly by improved function and res- ution of other signs of inflammation. And utazolidin alka is well tolerated, especially nce it contains antacids and an antispas- odic to minimize gastric upset.

ontraindications
dema, danger of cardiac decompensation; story or symptoms of peptic ulcer; renal, epatic or cardiac damage; history of drug lergy; history of blood dyscrasia. The drug iould not be given when the patient is se- le, or when other potent drugs are given oncurrently. Large doses are contraindi- ated in patients with glaucoma.

recautions
otain a detailed history and a complete iysical and laboratory examination, including a blood count. The patient should be closely supervised and should be warned to report immediately fever, sore throat, or mouth lesions (symptoms of blood dyscrasia); sudden weight gain (water retention); skin reactions; black or tarry stools. Make regular blood counts. Use greater care in the elderly.

Warning
If coumarin-type anticoagulants are given simultaneously, watch for excessive increase in prothrombin time. Pyrazole compounds may potentiate the pharmacologic action of sulfonylurea, sulfonamide-type agents and insulin. Carefully observe patients receiving such therapy.

Adverse Reactions
The most common are nausea, edema and drug rash. Hemodilution may cause moderate fall in red cell count. The drug may reactivate a latent peptic ulcer. Infrequently, agranulocytosis, generalized allergic reaction, stomatitis, salivary gland enlargement, vertigo and languor may occur. Leukemia and leukemoid reactions have been reported but cannot definitely be attributed to the drug. Thrombocytopenic purpura and aplastic anemia may occur. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hepatitis, jaundice, and several cases of anuria and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently.

Dosage
The initial daily dosage in adults is 300-600 mg. daily in divided doses. In most instances, 400 mg. daily is sufficient. When improvement occurs, dosage should be decreased to the minimum effective level: this should not exceed 400 mg. daily, and is often achieved with only 100-200 mg. daily.

Also available: Butazolidin®,
brand of phenylbutazone
Tablets of 100 mg.

Geigy Pharmaceuticals
Division of Geigy Chemical Corporation
Ardsley, New York

BU-3804 P

Geigy

State Law Quoted On Narcotic License:

Several physicians have asked questions about the Michigan law that requires a doctor to obtain an annual license to prescribe narcotics.

Following is the complete wording of section 335.53 of the Uniform Narcotic Drug Act:

Narcotic drugs, licenses; application, filing, fee, term, renewal. M.S.A. 18.1073.

> Sec. 3. No person shall manufacture, compound, mix, cultivate, grow, or by any other process produce or prepare narcotic drugs, and no person shall sell, prescribe, administer or dispense any narcotic drugs without having first obtained a license so to do from the state director of drugs and drug stores. Application for such license shall be in writing and shall be accompanied by the payment of said director of drugs and drug stores, the sum of $2 as a license fee. Such licenses shall be valid for a period of one year commencing on July first and ending on the 30th day of the next June and each license shall contain the name of the licensee and the address of the place at which said business or profession will be conducted. All licenses shall be renewable annually on or before July first of each fiscal year.

Reports 4,500 Youngsters Start on Cigarettes Every Day in Nation

Some 18 million Americans have kicked the cigarette habit in the last 28 months, but about 4,500 youngsters a day take the first step toward getting hooked, former U. S. Surgeon General Luther L. Terry reports.

It is among young persons, Terry said, that the greatest challenge arises for anti-smoking groups to spread the gospel that cigarette smoking is "one of the most serious health problems facing the American people."

Some of the 18 million switched to pipes, cigars and other forms of tobacco.

Yet, Terry told a meeting of local, state and national voluntary groups on smoking and health, many people still are unconvinced.

But he said there is hope yet that the message will get through to teen-agers.

Nursing Homes Name Medicare Intermediary

The Travelers Insurance Company has been selected as fiscal intermediary under Medicare by administrators of nursing homes at the 18th annual convention, in Detroit, of the Michigan Nursing Home Association.

Members attending the convention were given the opportunity to hear representatives from Travelers Insurance Company and Blue Cross. This fiscal intermediary will handle payments to extended care facilities under the Medicare Law.

More than 400 nursing-home and home-for-the-aged administrators are attending the convention.

Televise Surgery

In cooperation with the American Cancer Society, WOOD-TV telecasted in color a laryngectomy performed by Robert D. Burton, M.D., Grand Rapids.

The program dealt with the diagnosis, surgical procedure and esophageal voice training for a patient having laryngeal cancer. The program originated at Butterworth Hospital in Grand Rapids.

Among the complex equipment at The Upjohn Company's new research building in Kalamazoo is this radio-respirometer. The radio-respirometer continuously records the amount and rate of respiratory gas exchange of test animals, an expression of total body metabolism. The instrument can also calculate the amount of radioactive CO_2 a test animal exhales as a result of the action of the animal's body on radioisotope-labeled test drugs.

"All Interns are Alike"

It stands to reason. They all go through the same training; they all have to pass the same tests; they all have to measure up to the same standards; they all are underpaid, too. Therefore, all interns are alike.

That's utter nonsense, of course. But it's no more nonsensical than what some people say about aspirin. Namely: since all aspirin is at least supposed to come up to certain required standards, then all aspirin tablets must be alike.

Bayer's standards are far more demanding. In fact, there are at least *nine specific differences* involving purity, potency and speed of tablet disintegration. These Bayer® standards result in significant product benefits including gentleness to the stomach, and product stability that enables Bayer tablets to *stay* strong and gentle until they are taken.

So next time you hear someone say that all aspirin tablets are alike, you can say, with confidence, that it just isn't so.

You might also say that all interns aren't alike, either.

BAYER
ASPIRIN
FAST PAIN RELIEF
Genuine
ORANGE FLAVORED
BAYER
ASPIRIN
FOR
CHILDREN
SAFE-TIGHT CAP
Genuine
50 TABLETS

Hudson Cites Medicare Fears

"Medicare as it stands is less undesirable for what it is than for what it may become," declared AMA President Charles L. Hudson, M.D., native of Merrill, in an address at Saginaw several weeks before he was installed June 28 to lead the AMA.

Doctor Hudson told a festive meeting of the Saginaw County Medical Society that "private financing of health care may falter and may cease. Such an event would discourage and destroy the private effort. . . . What's bad is that where there is total dependence upon the federal government for financing, private individuals and private agencies are impotent to make adjustments . . . if deficiencies are found. Dollars leaving the taxpayer and finding their way to the national treasury are appropriated according to the dictates of individuals who do not have a particular interest in health care."

* * *

DOCTOR HUDSON continued: "Health programs compete with other programs for support. If the amount of money is insufficient, economics must be practiced which would reduce either the number or the quality of the services rendered or would require the vendors of service to be underpaid."

Doctor Hudson concluded: "It is my hope that the medical profession through its local, state and national components will keep abreast of these developments and will not abdicate from what I consider to be their natural interest and traditional responsibility.

"We are for many more things than we are against, and of the things we are for above all else is a continuance of a system of medicine that has your good health as its core."

* * *

IN HIS OPENING comments, Doctor Hudson declared: "My feeling is that the real threat comes from the expansion of the program to the point where all people of the country are involved, and where the financing is exclusively at the hand of the federal government. The federal government has, in effect, obtained permission from the people to purchase health services for individuals who do not need help in financing their health care, people who are not wards nor employes of the government, and are not public assistance recipients. The establishment of this principle, that the federal government should levy taxes and appropriate money for services to those who are not in need, removes the last restriction as to whom or how many individuals may be embraced in a federal medical care system . . . the foot is in the door as many proponents of expansion have mentioned, and activities for widening the opening have already begun."

The Saginaw County Medical Society meeting with Doctor Hudson as the speaker was special in many ways. The program participants pointed out that Doctor Hudson was born in nearby Merrill, was graduated from Saginaw High School and then the

Charles L. Hudson, M.D., center, a native of Merrill, enjoyed a welcome-home celebration by the Saginaw County Medical Society. Shown at the SCMS banquet are Bert M. Bullington, M.D., left, and Vital E. Cortipassi, M.D., county president.

One of the participants in the Hudson salute was Henry J. Meyer, M.D., right, first president of the Saginaw County Medical Society. Here he visits with C. Allen Payne, M.D., MSMS president-elect, and Henry Marsh, Mayor pro-tem.

University of Michigan School of Medicine.

Among the guests were W. N. Hubbard, Jr., M.D., dean of the University of Michigan; E. D. Gardner, M.D., dean of the Wayne State University Medical School; C. A. Payne, M.D., Grand Rapids, president-elect of the Michigan State Medical Society; W. A. Hyland, M.D., Grand Rapids, chairman of MSMS delegation to the AMA; H. H. Hiscock, M.D., Flint, chairman MSMS Council; and Hugh Brenneman, executive director of the MSMS.

* * *

IT WAS A DELIGHTFUL evening for Henry J. Meyer, M.D., Bridgeport. Doctor Meyer, who was 93 on June 20, shared the pleasure of accepting the re-charter of the Saginaw County Medical Society with V. E. Cortopassi, M.D., president of the county society. Doctor Meyer was president in 1902 when the original charter was presented.

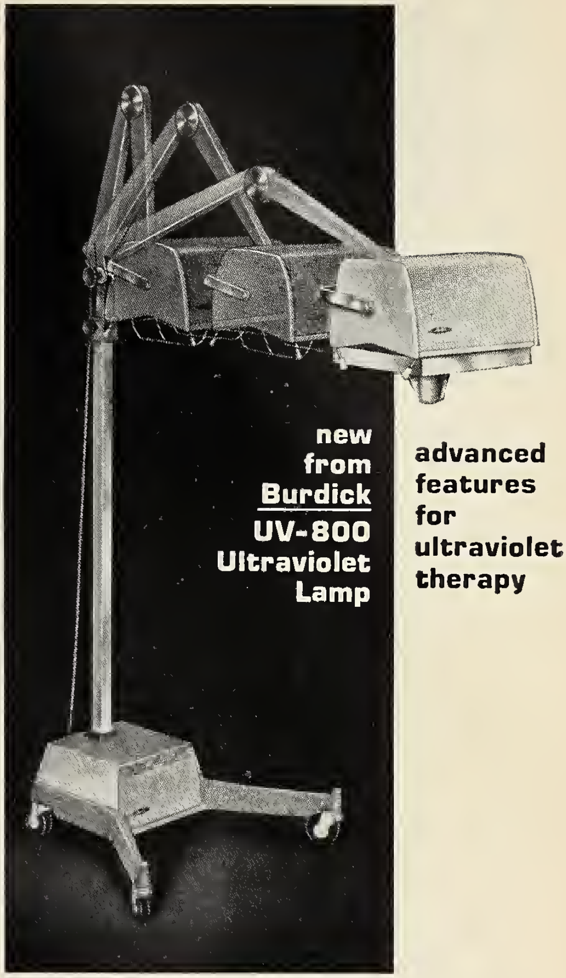
Bert M. Bullington, M.D., past president of the Saginaw Society, had the pleasure of introducing the guest of honor. He had served with Doctor Hudson then Col. Hudson, in Europe during World War II.

More than 150 persons were present, including representatives of the Bay and Tuscola County Medical Society.

Calhoun County Medical Society has helped to establish a "Clifford W. Brainard Memorial Fund" to assist crippled children of the area. Doctor Brainard, who died in May, was the founder of the Crippled Children's Clinic and the Leila Hospital.

ING UP FOR BETTER HEALTH
13
HEALTH TOPICS
Featured on
SHIRLEYS SHOW
THURSDAYS 1200-1230PM

Television station WZZM-TV of Grand Rapids was one of the co-sponsors of the Western Michigan Health Fair in Muskegon, and did much to promote the MSMS Healthmobile. Each day, Shirley Clark presented medical authorities on her TV show, opening the first day with MSMS President-Elect C. Allen Payne, M.D., who cut the gauze to open the show. The WZZM-TV booth at the Fair utilized attractive AMA posters.



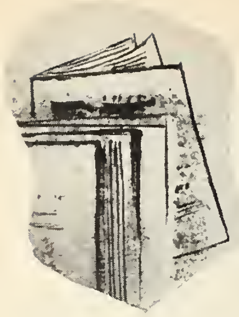
Burdick's unique **Equipoise Arm** gives you "full-reach" over the treatment table, and easy positioning for any treatment situation. Reflector unit floats into position with finger-tip ease — and holds. Reflector unit rotates 360° on its own axis, allowing the operator to select the correct angle and position for any treatment. New **"Localizer"** with 2-inch cone (supplied as standard equipment) permits uniform focusing of radiation to small treatment areas. The **Localizer** may be quickly attached to the reflector hood, and easily removed.

Telescoping vertical column permits storage of the UV-800 in a compact space. Shutters mounted inside the reflector effectively shield stray radiation when the lamp is not in use. Wide-stance base and large, easy-rolling casters give the UV-800 easy mobility and good stability during treatments. Efficient, high-intensity radiation — full mercury arc spectrum — short treatment time — long tube life. Now is the time to modernize your ultraviolet equipment. Consider all the features of the stylish new UV-800, then see your Burdick dealer or write The Burdick Corporation, Milton, Wisconsin 53563, about trading-up!

Medical Arts Supply Co.

311 State Street
Grand Rapids, Michigan

LEGAL OPINIONS



Opinion on MD Review of Charts:

(The MSMS Council has requested that the following two opinions by MSMS Legal Counsel Lester P. Dodd be printed for all members to study.)

Question: Can a physician serving on a utilization committee of a hospital review charts of patients hospitalized under the care of another physician without permission?

It is not clear from the question whether reference is to permission of the patient or permission of the treating physician. If, however, Legal Counsel may assume that the existence and functions of review committees are recognized by staff and hospital bylaws and regulations, Legal Counsel is of the opinion that the permission of neither patient nor treating physician is mandatory.

Legal Counsel reaches this conclusion with respect to the treating physician on the ground that if the existence of review committees is recognized by staff bylaws the physician, as a member of the staff, has necessarily consented.

Although there is little if any specific legal authority on the question, it is Legal Counsel's opinion that express permission of the patient is not required in order that his charts could be reviewed by authorized staff or hospital committees. It must be recognized that in the modern hospital good patient care requires that many persons including nurses, residents, pathologists, technicians, librarians, etc., must have access to otherwise confidential information or records pertaining to the patient and that necessarily the patient has impliedly consented that his records be available to those persons in the exercise of their assigned duties. Legal Counsel regards tissue and utilization committees as falling within the category of authorized hospital personnel.

It is perhaps unnecessary to point out that the patient's implied consent to examination of his charts extends only to authorized hospital personnel acting in the exercise of normal hospital functions and procedures and that those who, in that capacity, have access thereto must not disclose information contained therein to unauthorized persons.

As an added precaution, Legal Counsel believes that hospitals would be well advised to include in their admitting forms consents authorizing normal access to their charts and records by authorized hospital personnel.

Offers Advice on Screening Reports

Question: In regard to screening programs for nonreportable diseases, after which the patient has been advised to see his personal physician, can the private physician report the subsequent findings back to the screening agency without release from the patient?

In Legal Counsel's opinion the physician should, in order to be completely protected, obtain the consent of his patient to release of his findings. In most cases there would be little practical danger of incurring liability if the doctor should fail to do so since the patient has voluntarily submitted himself to a screening program, and, with some logic, might be said to have impliedly consented to a limited disclosure. Conceivably, however, there could be circumstances under which the patient could suffer harm or embarrassment through unauthorized disclosure with consequent liability to the physician.

Legal Counsel therefore feels that the only safe rule to follow is—obtain the patient's consent.

KINGSWOOD HOSPITAL, Michigan's finest
and newest facility for intensive, short-term
treatment of voluntary
neuropsychiatric patients.

Philip N. Brown, M.D.
Medical Director

Marvin J. Lawrence, F.A.C.H.A.
Administrator

KINGSWOOD HOSPITAL
10300 W. EIGHT MILE ROAD
FERNDALE 20, MICHIGAN Telephone: Area 313 398-3200

brings peace to the hyperactive colon

CANTIL®

(mepenzolate bromide)

helps restore normal motility and tone

"In 40 of 44 cases of irritable or spastic colon, Cantil [mepenzolate bromide] or Cantil with Phenobarbital reduced or abolished abdominal pain, diarrhea and distention and promoted restoration of normal bowel function . . . Cantil [mepenzolate bromide] proved to be singularly free of anticholinergic side-effects . . . Urinary retention, noted in two cases was eliminated in one by reducing dosage."[1]

IN BRIEF: One or two tablets three times a day and one or two at bedtime usually provide prompt relief. Cantil with Phenobarbital may be prescribed if sedation is required.

Dryness of the mouth or blurring of vision may occur but it is usually mild and transitory. Urinary retention is rare. Caution should be observed in prostatic hypertrophy—withhold in glaucoma. Cantil with Phenobarbital is contraindicated in patients sensitive to phenobarbital.

Supplied: CANTIL (mepenzolate bromide)—25 mg. per scored tablet. Bottles of 100 and 250. CANTIL with PHENOBARBITAL—containing in each scored tablet 16 mg. phenobarbital (warning: may be habit forming) and 25 mg. mepenzolate bromide. Bottles of 100 and 250.

1. Riese, J. A.: Amer. J. Gastroent. 28:541 (Nov.) 1957

LAKESIDE LABORATORIES, INC. Milwaukee, Wisconsin 53201

LAKESIDE

PRODUCTS
FOR PATIENTS
YOU SEE
EVERY DAY

Better News Flow Ideas Offered

Several suggestions were offered to physicians and medical organizations to improve the accuracy and flow of medical news in the newspapers at the Conference on Medical News Reporting at MSU recently. MSMS was one of the co-sponsors for the one-day workshop.

Following are some of the comments of a panel presentation:

Brock E. Brush, M.D., Chairman of the MSMS Public Relations Committee and President of the Wayne County Medical Society, said, "Historically the medical profession has been slow in giving out news. Recently, however, we have come to realize that people want to know and are entitled to know what is going on in the medical profession. The press and physicians together have been doing a good job, but we can always use improvement to present medical news fairly, accurately, and favorably."

Jack Bell, News Editor, *Kalamazoo Gazette*, said: "The important medical stories are still locked up behind hospital doors. There are many facets of the day-to-day workings of the medical profession which would make fascinating stories."

Mr. Bell felt that one of the problems was that some doctors did not give their confidence to the science medical writers and that therefore each area should have a central, public relations clearing house of the medical society.

Edward Miller, Science Writer, *Saginaw News*, strongly recommended that newsmen be invited to attend the various county meetings of the medical society not only to report on what went on there, but also to find possible leads for stories. For example, he mentioned that, if an operation which was done in London, England, is duplicated locally, such an operation has news value because of its local importance. It need not be the first time, nor have any special esoteric appeal, but if it is of significance to the local community and performed on behalf of one of the members of the community, it is of importance.

Interest among the newsmen and physicians was high in the panel presentation at the Conference on Medical News Writing. The panel included, left to right, Jack Bell, *Kalamazoo Gazette*, Edward Miller, standing, *Saginaw News*, and Brock E. Brush, M.D., Detroit, chairman of the MSMS Public Relations Committee.

Suggest Rural-Suburban PR Projects

County medical societies and physicians who serve rural and suburban communities may wish to consider these possible projects:

1. Sponsor or assist in sponsoring with other agencies a district rural health conference.

2. Help with physician-procurement in rural areas by
   (a) Offering loan funds for medical students.
   (b) Considering preceptorship programs.
   (c) Urging draft deferment for young physicians who will practice in rural areas.
   (d) Adopting a program to study physician needs in rural areas and working toward a plan to improve the situation.

3. Meet with Agricultural Extension Service staff to develop health education programs for rural areas.

4. Assist 4-H health program through immunization campaigns, etc.

5. Assist in promoting farm and rural safety programs.

6. Cooperate with health department on health programs.

7. Prepare news releases on rural health concerns in local papers and magazines.

8. Provide resource people for health education programs.

9. Work with health council or council-type committee to develop health improvement programs.

These ideas were developed at the 1966 National Conference on Rural Health, sponsored by the AMA. Robert Rice, M.D., Greenville, chairman of the MSMS Rural Health Services Committee, represented MSMS at the conference. The above ideas were part of Dr. Rice's report to the MSMS Council.

In Memoriam

John Blair Barnwell, M.D.

John Blair Barnwell, M.D., 71, retired Ann Arbor physician, died May 4 in Philadelphia, Pennsylvania.

Born in Selma, Alabama, Doctor Barnwell was graduated from the University of Pennsylvania Medcal School in 1923, which later granted him an honorary degree of Doctor of Science. Doctor Barnwell nterned at Lying-in-Hospital, Philadelphia, 1923-1925, and came to Ann Arbor in 1928 as director of he Tuberculosis Unit, a position he held until 1946 when the Veterans Administration called him to Washington as Chief of the TB Division. Doctor Barnwell served as Chief Assistant Medical Director n charge of Research and Education from 1956 to 1960 when he retired from the Veterans Service.

Doctor Barnwell was President of the American Thoracic Society in 1942, and in 1950 received the American Tuberculosis Association Trudeau Medal. Following his retirement in 1960, Doctor Barnwell ontinued as consultant for the New York and New ersey Tuberculosis Associations.

Doctor Barnwell, a member of Alpha Omega Alpha, was a Retired Member of the Michigan State Medical Society.

Clifford W. Brainard, M.D., Battle Creek

Clifford W. Brainard, M.D., Past President of the Calhoun County Medical Society, died May 6 in Battle Creek where he practiced as an orthopedic surgeon for more than 30 years. He was 72.

A native of Battle Creek, Doctor Brainard received his medical degree from the University of Michigan Medical School in 1918, and in 1927 returned for graduate work in bone and joint surgery. In 1956 Doctor Brainard was appointed orthopedic consultant and hospital field representative of the Michigan Crippled Children's Commission, a position he held until his retirement in 1964. His hospital affiliations included Leila Post and Community Hospitals, Battle Creek.

Doctor Brainard was a fellow of the American College of Surgeons, certified by the American Board of Orthopedic Surgeons, a member of the Clinical Orthopedic Surgeons, and the first Emeritus member of the Michigan State Orthopedic Society.

During World War I and World War II Doctor Brainard served in the United States Navy.

Doctor Brainard was a life member of the Michigan State Medical Society.

★

Specialized Service

IN

PROFESSIONAL LIABILITY INSURANCE

is a high mark of distinction

THE

MEDICAL PROTECTIVE COMPANY

FORT WAYNE, INDIANA

Professional Protection Exclusively since 1899

DETROIT OFFICE:

G. A. Triplett, R. K. Wind, and G. J. Haworth, Representatives

2405 West McNichols Road, Detroit 48221 Telephone: 313-862-8064

Charles R. Dengler, M.D., Jackson

Charles R. Dengler, M.D., Past President of the Jackson County Medical Society, died May 18 at his residence. He was 75.

A native of Shenandoah, Pa., Doctor Dengler was graduated from Jefferson Medical College, Philadelphia, in 1914. Jackson's first practicing pediatrician, Doctor Dengler maintained offices there for 52 years. Doctor Dengler was a former chairman of the Foote Hospital Board of Managers, and was also affiliated with Mercy Hospital, both of Jackson. He was a member of Phi Alpha Sigma medical fraternity.

During World War I Doctor Dengler served in the Medical Corps.

Doctor Dengler was a life member of the Michigan State Medical Society.

Voss Harrell, M.D., Dearborn

Voss Harrell, M.D., Dearborn otolaryngologist, died April 8 at Northwest Grace Hospital where he was attending surgeon. He was 70 years old.

Doctor Harrell was graduated from the Indiana University School of Medicine in 1919. He was former vice-chief of the ear, nose and throat department of Northwest Grace Hospital and was also affiliated with Carpenter Hospital, Wayne. Doctor Harrell was a member of Phi Rho Sigma and Delta Tau Delta medical fraternities.

During World War I Doctor Harrell served in the U. S. Army.

Doctor Harrell was an Associate Member of the Michigan State Medical Society.

Robert R. King, M.D. Grosse Pointe

Robert R. King, 46, director of medical and physical rehabilitation of Wyandotte General Hospital, died in March.

Doctor King received his medical degree from Bowman Gray Medical School, North Carolina, in 1944 and specialized in physical medicine and rehabilitation. From 1950 to 1962 Doctor King was on the faculty of the University of Puerto Rico School of Medicine. Doctor King was a member of the American Congress of Physical Medicine and Rehabilitation, the American Academy of Physical Medicine and Rehabilitation, Michigan Chapter, the American Public Health Association and the Michigan Public Health Association.

Fred W. Organ, M.D., Highland Park

Fred W. Organ, M.D., 84, retired general practitioner, died May 12.

A native of Waterdown, Ontario, Canada, Doctor Organ was graduated from the Wayne State University School of Medicine in 1910, and in 1960 was given its Golden Anniversary Diploma. A member of Phi Beta Pi medical fraternity, Doctor Organ was on the staff of Providence Hospital, Detroit, until his retirement in 1964.

Doctor Organ was a Life Member of the Michigan State Medical Society and received its 50 Year Award in 1960.

Cyrus C. Sturgis, M.D., Ann Arbor

Cyrus C. Sturgis., M.D., professor emeritus of internal medicine at the University of Michigan Medical Center, died May 27 at age 75.

Born in Pendleton, Oregon, Doctor Sturgis received his M.D. degree from Johns Hopkins University in 1917. He joined the University of Michigan Hospital in 1927 as the first director of the Thomas Henry Simpson Memorial Institute, and a year later became chairman of the department of internal medicine. Prior to that he was on the staff of Peter Bent Brigham Hospital in Boston and was on the faculty of Harvard University.

A Past President of the American College of Surgeons, Doctor Sturgis was also a regent of the American College of Physicians for nine years, and a past vice president of the Washtenaw County Medical Society. His medical fraternities were Alpha Omega Alpha and Sigma Xi and he was a member of Phi Beta Kappa, national honorary fraternity. Memorials created in his life time include the Sturgis Library of Hematology and the Cyrus C. Sturgis Visiting Professorship in Internal Medicine, both at U of M.

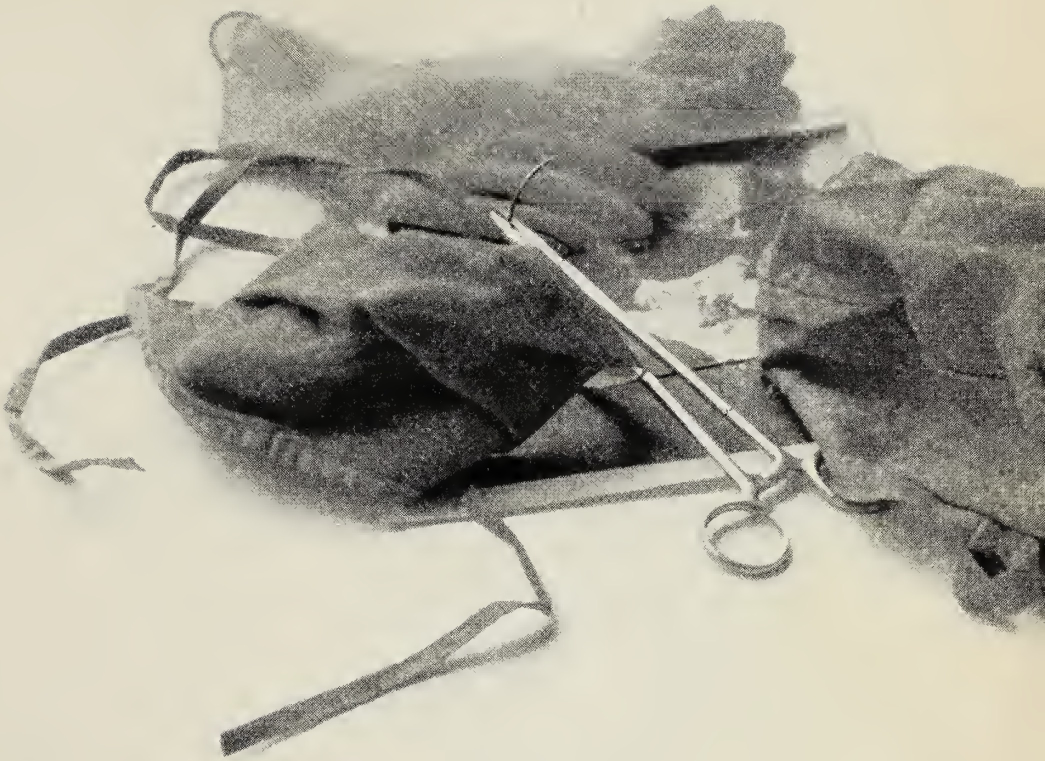
During World War I Doctor Sturgis served as a First Lieutenant in the Medical Corps.

Doctor Sturgis was a Life Member of the Michigan State Medical Society.

Helen Wilson Wollank, M.D., Grosse Pointe

Helen W. Wollank, M.D., former Grosse Pointe general practitioner, died May 4 at Las Vegas, Nevada. She was 51.

Doctor Wollank received her medical degree from the University of Colorado Medical School in 1943. She was affiliated with Cottage Hospital, Grosse Pointe, and St. John Hospital, Detroit.



after surgery

B and C vitamins are therapy: Therapeutic amounts of B and C in stress formula vitamins often are vital during periods of physiologic stress. STRESSCAPS capsules, designed to meet increased metabolic demands, aid in achieving a more comfortable convalescence, a more rapid recovery. After surgery, as in many stress conditions, STRESSCAPS vitamins are therapy.

STRESSCAPS

Stresscaps®

Stress Formula Vitamins Lederle

FOR PROFESSIONAL RECOMMENDATION ONLY

Each capsule contains:

Vitamin B_1 (Thiamine Mononitrate)	10 mg
Vitamin B_2 (Riboflavin)	10 mg
Vitamin B_6 (Pyridoxine HCl)	2 mg
Vitamin B_{12} Crystalline	4 mcgm
Vitamin C (Ascorbic Acid)	300 mg
Niacinamide	100 mg
Calcium Pantothenate	20 mg

Recommended intake: Adults, 1 capsule daily, for the treatment of vitamin deficiencies. Supplied in decorative "reminder" jars of 30 and 100; bottles of 500.

LEDERLE LABORATORIES, A Division of American Cyanamid Company, Pearl River, New York Lederle

627-6—3613

From the Mailbag

The May, 1966 issue of Michigan Medicine contained two very interesting, but contradictory articles. The one by John S. Clark, President of the State Bar of Michigan, stated: "No citizen can be only a spectator in our fight to preserve law and order. By respecting and obeying all laws, by aiding public officials in the *prevention* of crime, by bearing witness against crime, by serving on juries when called—we can strengthen and maintain freedom."

The other by the Legal Counsel of MSMS, Lester P. Dodd, advocates "the maintenance of the physician-patient privilege is an essential to good medical practice and that its gradual erosion through more and more exceptions is not in the interest of good medical practice."

We who are physicians, particularly those who are psychiatrists, often are aware that our patients hold responsible positions which unconsciously may harm or kill many other innocent individuals in addition to themselves.

Airplane pilots flying airplanes with passengers may unconsciously crash into mountains. Employees of security agencies of the federal government may betray this country by giving information to foreign agents causing irreparable harm to this country. Others may kill others and themselves because of subconscious fixed ideas. Should not physicians who could have prevented these accidents, betrayals, and murders be held to account when they knew of such possibilities and often probabilities. Individuals would not visit psychiatrists of psychoanalysis if they were not mentally disoriented. No one goes to a doctor for years unless he is ill, and if he is a mentally-ill person, should not he be prohibited from holding positions in which he may harm others. Physicians should be made legally responsible for not notifying governmental agencies of their patient's condition in such instances so that the patient can be placed in a position where he could not harm others until the condition can be reversed.

There are laws where certain communicable diseases, injuries from firearms, etc., must be reported. When the good of the many infringes on the physician-patient privilege, then privilege has no right to prevail.

If laws are passed which give immunity to physicians for reporting such conditions, many automobile accidents, in addition to other types of accidents, would be eliminated. This seems equally as import-

CANDIDATES FOR
"THE MOST EFFECTIVE SUNSCREEN"[1] OR WINDSCREEN

RVP®-ELDER
RED PETROLATUM

RVP-Elder, called "the most effective sunscreen," is also an ideal windscreen.

Constant occupational exposure to sun and wind often causes major discomfort in producing irritating sunburned and windburned skin . . . commonly found in street workers, construction workers, and telephone linemen, to mention a few.

There's reassuring protection and skin comfort for those outdoor workers who use RVP-Elder. Swimmers, golfers and others engaged in outdoor activities can have the same skin protection.

A razor-thin layer of only 10 microns adheres tenaciously to the skin for hours, yet washes off easily with soap and water. Virtually invisible, RVP-Elder is odorless, non-staining, and perspiration and water resistant, even while swimming. No sensitivity has been encountered.

Supplied in 2 oz. and 16 oz.

Write for clinical trial package and absorption spectrum

References: (1) Schoch, A. G.: Current News in Dermatology, August, 1963; (2) Jillson, O. F., and Baughman, R. D.: Arch. Dermat. 88:409, 1963; (3) Cole, H. N., et al.: J.A.M.A. 130: 1, 1946; (4) MacEachern, W. N., and Jillson, O. F.: Arch. Dermat. 89: 147, 1964.

ALSO AVAILABLE: NEW RVP Aerosol, RVP-2, RVPaque, RVPellent

PAUL B. ELDER COMPANY • Bryan, Ohio

nt as controlling communicable diseases in some instances and the reporting of firearm wounds.

Henry Turkel, M.D.
Detroit

The MSMS Healthmobile provided a real service in better informing the public about the history of medicine in Michigan, and medicine in general. In my opinion it is one of the finest avenues for giving the public a glimpse of the medical world and what it means to them.

Larry Bush
Science Writer
Ann Arbor News

I note according to the list of books by M.D. professors of University of Michigan and Wayne State University, that our publication has been omitted. Drs. S. E. Gould, D. L. Hinerman, J. G. Batsakis, and P. R. Beamer are the authors of a book entitled *Microscopic Pathology,* published by Williams and Wilkins Co., Baltimore, Maryland, in 1964. This book is designed as a quick reference handbook of pathological lesions for students of pathology and for residents in all fields of medicine.

We have received excellent reviews in journals in the United States, Great Britain, Germany, and Japan. These reviews point out the excellence of the book, especially for young persons training in various specialties. It is for this reason that I call your attention to the importance of including the title in any similar list in the future.

D. L. Hinerman, M.D.
Ann Arbor

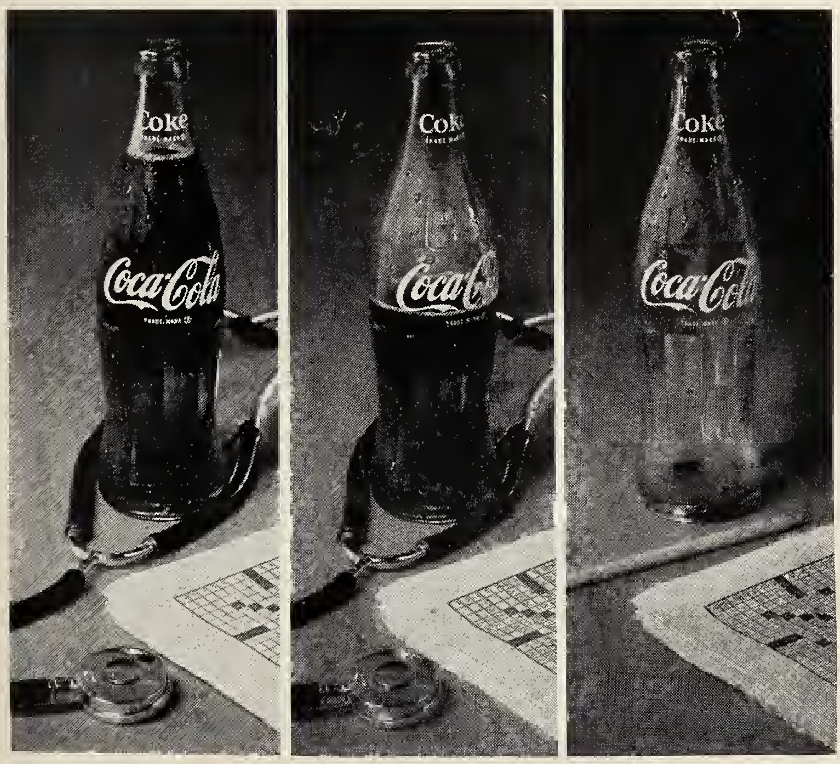
Thank you for the certificate of Life Membership in the Michigan State Medical Society.

My many active years, including those years as chairman of the surgical section, have long convinced me that we have one of the best state societies in the nation, if not the very best.

J. C. Foshee, M.D.
Grand Rapids

TAKE A BOW

The efforts of the Auxiliary to the Calhoun County Medical Society were recognized in the May issue of "MD's Wife," a quarterly publication by the AMA for physicians' wives. The issue described the Calhoun Auxiliary project of providing scholarships in nursing and allied career fields.



The meaningful pause. The energy it gives. The bright little lift. Coca-Cola with its never too sweet taste, refreshes best. Helps people meet the stress of the busy hours. This is why we say things go better with Coke
TRADE-MARK ®

PERSONAL MENTION

FRANKLIN L. TROOST, M.D., Holt, who was honored by MSMS in 1965 as "Michigan's Outstanding Physician" has received a plaque from the American Legion Post at Holt for "devoted professional service and citizen participation to his community and schools."

WILLIAM F. STRONG, M.D., Ontonagon, long a delegate from Ontonagon County, was honored at several testimonial dinners there before he left to establish a new practice at Chico, California. The **Ontonagon Herald** reported that "his talents as a physician, surgeon and community leader touched not only the personal health needs of his patients but the many civic and community activities that he actively supported and promoted."

A. HAZEN PRICE, M.D., Detroit, has completed a four-year term on the Medical Advisory Committee to the Social Security Administration. Doctor Price is chairman of the MSMS Geriatrics Committee.

MAURICE REIZEN, M.D., Huntington Woods, and ARTHUR NEWITT, M.D., Lansing are in the news in Lansing. Doctor Reizen, formerly president of the Macomb County Medical Society, became the director of the Ingham County Health Department July 1. Doctor Newitt left the post in February to comply with the state's mandatory retirement at age 70.

CHARLES NO. HOYT, M.D., Detroit formerly of Port Huron where he served as a MSMS Councilor, took further training in psychiatry at Lafayette Clinic, and now is directing the new adolescent section within the Child Psychiatric Division at the Pontiac State Hospital.

RALPH S. GREEN, M.D., Rochester, has been appointed to the Advisory Panel on Psychiatric Hospitals formed by the National Blue Cross Association. He attended a meeting in this capacity in Chicago this spring.

PHILIP J. MOORE, M.D., Owosso, was honored recently for his work in the care of those afflicted by multiple sclerosis. He has served three terms as president of the Michigan Chapter of the National Multiple Sclerosis Society.

R. L. MAINWARING, M.D., Dearborn, is now vice president of the American Association of Blood Banks.

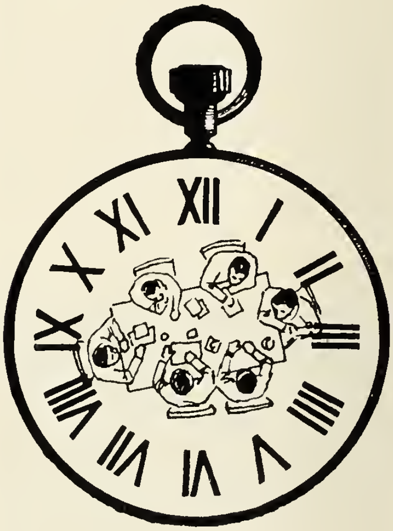
EMANUEL TANEY, M.D., Detroit, is now vice president of the Michigan Association for Law and Psychiatry.

LAWRENCE A. DROLETT, M.D., Lansing, has joined the medical staff of Olin Memorial Student Health Center at Michigan State University. He formerly had been in general practice in Lansing for 30 years.

DUANE L. BLOCK, M.D., Dearborn, is now second vice president of the Industrial Medical Association. Doctor Block is physician-in-charge of the Ford Rouge Medical Service.

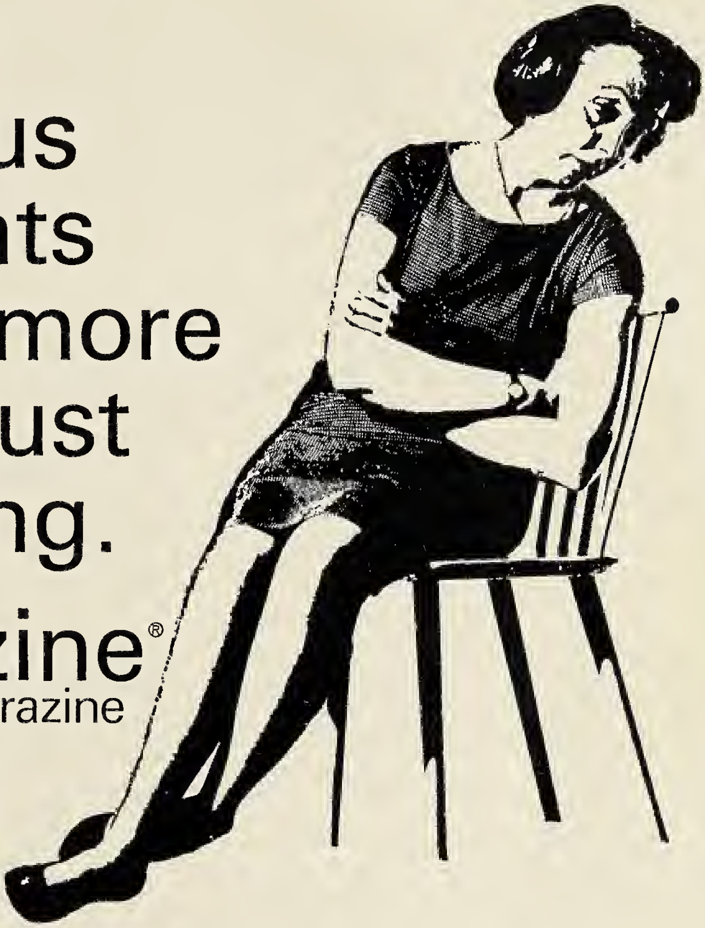
WILLIAM JEND, JR., M.D., Detroit, has been named to the Board of Directors of the Industrial Medical Association. He is medical director of Michigan Bell Telephone.

BERT VAN ARK, M.D., Eaton Rapids, has been presented the first honorary life membership by the Eaton Rapids VFW Alumni Association. Doctor Van Ark has been the National Home's physician there for many years.



Postgraduate medical education must be a continuing process—every hour around the clock and every day of the week.

The major postgraduate medical experience offered each year by the Michigan State Medical Society is its annual fall Scientific Session. The 1966 program will be offered in Grand Rapids September 27-28-29-30. Every physician is urged today to block out his calendar so he will be able to hear national medical authorities helping him to practice better in his home community.



Many anxious patients need more than just calming.

Stelazine®
brand of trifluoperazine
offers true tranquilization.

Sedative or muscle relaxant-type tranquilizers are often all that's needed for patients with temporary situational anxiety. But in the many patients whose anxiety presents a continuing problem these agents are limited by their generalized dulling effects.

'Stelazine' can attack anxiety directly without producing annoying dulling effects. On 'Stelazine', patients can react more normally to day-to-day stress yet remain alert, able to carry on their normal activities.

Contraindicated in comatose or greatly depressed states due to CNS depressants and in cases of existing blood dyscrasias, bone marrow depression and pre-existing liver damage. *Principal side effects,* usually dose related, may include mild skin reaction, dry mouth, insomnia, fatigue, drowsiness, dizziness and neuromuscular (extrapyramidal) reactions. Muscular weakness, anorexia, rash, lactation and blurred vision may also be observed. Blood dyscrasias and jaundice have been extremely rare. Use with caution in patients with impaired cardiovascular systems. Before prescribing, see SK&F product Prescribing Information.

SK&F Smith Kline & French Laboratories, Philadelphia

CLASSIFIED ADVERTISING

$2.50 per insertion of fifty words or less, with an additional five cents per word in excess of fifty.

FOR RENT: Office space, 7 rooms completely equipped for Ophthalmologist or Otolaryngologist. Write: W. C. Behen, M.D., 535 S. Capitol Avenue, Lansing, Michigan.

WATERFRONT OPPORTUNITY: An architectural masterpiece that is located on beautiful Elk Lake. Built and designed for a doctor who has kept the property in practically new condition. Features are too numerous to mention in this ad, but complete details will be mailed to interested parties. Priced at $45,000. Many other waterfront listings available in nearly all price ranges. Member, Patridge & Associates, Inc., Zimmerman-McDonnell Realty Company, 874 East Eighth Street, Traverse City, Michigan, Phone WI 7-7390.

PUBLIC HEALTH PHYSICIAN — to work in generalized community public health program in Lenawee County, population 80,000. Well established unit in growing community—within 35 miles of University Medical Center and School of Public Health, Ann Arbor, Michigan. Must be U. S. citizen, have Michigan License or eligibility for license. Tentative salary $22,000 with yearly increments. Apply to Lenawee County Health Department, 113 W. Front Street, Adrian, Michigan 49221.

WANTED: Locum tenens for the months of July, August, and as much of September as possible, or an associate to take the place of the one who is now specializing. This is a well established general practice in Southern Michigan, offices located in the hospital. Consider this an excellent opportunity for a young man. Contact: B. H. Growt, M.D., Addison, Michigan.

EASTERN WISCONSIN CLINIC in rapidly growing community of 40,000 desires board-eligible or certified physicians in pediatrics, obstetrics and gynecology, and internal medicine. Well-equipped clinic and excellent hospital facilities. Lake shore location offers ample recreational facilities. Attractive financial plan leading to early full partnership. Full expenses paid for applicants invited to interview. Call or write: F. L. Hildebrand, M.D., Riverside Clinic, Menasha, Wisconsin.

PHYSICIAN POSITIONS available in the Medical/Surgical Service or ward areas of a progressing psychiatric hospital. Active teaching program. Salary up to $18,771 per annum, plus 6% increase in July. Contact: L. J. Marx, M.D., Clinical Director, Ypsilanti State Hospital, Ypsilanti, Michigan 48197.

AGGRESSIVE SURGEON to head dynamic seven-man multi-specialty group with our ultra-modern clinic and hospital in Detroit suburb. Challenging scientific environment. Most rewarding financial arrangements. Write Box 18, 120 W. Saginaw Street, East Lansing, Michigan.

OB-GYN to join multi-specialty group. Growth area. Write Box 15, 120 W. Saginaw Street, East Lansing, Michigan.

MEDICAL SUITES, specialist desired, Newbergh Heights Medical Village, immediate occupancy, heating, air conditioning, FM system, intercom phone system, leaded x-ray room, luxurious reception room. Seeing is believing. Call area code 313-PA 2-5130.

WANTED PHYSICIAN interested in general practice with six-man group in suburbs of Detroit. Delicious salary and future partnership. Write Box 17, 120 West Saginaw Street, East Lansing, Michigan.

MEDICAL TECHNOLOGISTS: ASCP certified or eligible, modern clinical laboratory. Excellent salary and benefits in a 360-bed general hospital with large expansion and building program for 1966. Apply: Edward W. Sparrow Hospital, Personnel Office, Lansing, Michigan.

RESIDENTS IN PATHOLOGY: Edward W. Sparrow Hospital, Lansing, Michigan: a 360-bed, general, community, non-profit hospital expanding to 440 beds in 1966. The only hospital affiliated with new developing Michigan State University School of Medicine. Approved four-year residency in clinical and surgical pathology. 195 autopsies, 7500 surgicals, and 200,000 clinical procedures per year. Well equipped laboratory, staffed with two full-time Board Certified PA-OP Pathologists and a Technical Director, Ph.-D. in Bio-chemistry. Starting salary of $6,000 with yearly increases.

INTERNIST, age 35 or under, U. S trained, prior military service, for multi-specialty group practice near metropolitan area, lead to partnership. Reply Box 26, 120 W. Saginaw Street, East Lansing, Michigan.

GENERAL PRACTITIONER, age 32 or under, U. S. trained, prior military service, for multi-specialty group practice near metropolitan area, lead to partnership. Reply Box 27, 120 West Saginaw Street, East Lansing, Michigan.

PEDIATRICIAN to take over established practice in Windsor, Ontario, Canada, due to death. Office completely equipped. Nurse with many years experience also available. Write Box 25, 120 West Saginaw Street, East Lansing, Michigan 48823.

OB-GYN man looking for clinic association or good location for private practice. Reply to Box 24, 120 West Saginaw Street, East Lansing, Michigan.

PEDIATRICIAN wishes association with a clinic or group. Recently completed residency at Children's Hospital of Michigan. Detroit Eastside preferred. Reply: Box 23, 120 West Saginaw Street, East Lansing, Michigan.

WANTED: Ophthalmologist, Board Eligible or Board Certified, for large Detroit, Michigan, practice. Starting salary $24,000 to $30,000 plus percentage. To start any time. Write Box 22, 120 W. Saginaw Street, East Lansing, Michigan.

FOR RENT: Doctors eleven-room clinic in Mason, 12 miles from Lansing. Has been occupied by doctors for over 25 years. Wonderful opportunity for professional man to establish a future. Shortage of medical services in this charming and thriving community with many churches and good schools. Contact: Delmar Kramer, Dart National Bank, Mason, Michigan, ORchard 7-3661, evenings ORchard 6-5586.

PLAINWELL SANITARIUM, INC.

Plainwell, Michigan—MU 5-8441

Edwin M. Williamson, M.D.
M. Leroy Barry, M.D.

Dan W. Everett, M.D.
Wilbur R. King, Ph.D.

The Plainwell Sanitarium is a private psychiatric hospital licensed by the Michigan Department of Mental Health, and member of the American Hospital Association, Michigan Hospital Association, and National Association of Private Psychiatric Hospitals. Our extensive diagnostic treatment services include the following:

- Organic and psychological therapy for the psychiatrically and emotionally disturbed of all ages.
- Diagnostic evaluation of neurological disorders.
- Rehabilitative services for geriatric and convalescent patients.
- Medico-Legal counsel.
- Diagnostic and psychological evaluation and hospitalization, if indicated, of juveniles for Probate and Juvenile Courts.

THESE ADVERTISERS HELP MAKE MICHIGAN MEDICINE POSSIBLE

bbott	517, 518, 519, 520
mes Co., Inc.	Cover III
yerst Laboratories	569, 570, 571
ighton Hospital	578
rroughs Wellcome & Co.	575
lassified Advertising	576, 594
oca-Cola	591
der Company, Paul B.	590
eigy Pharmaceuticals	523, 579
lenbrook (Bayer)	581
ewlett Packard Co., Sanborn Division	564
ynson, Westcott & Dunning, Inc.	509
gram Co., G. A.	561, 574
ngswood Hospital	584
keside Laboratories	585
derle Laboratories	512, 513, 526, 566, 567, 589
Lilly, Eli and Co.	528
Medical Arts Supply	583
Medical Protective	587
Parke, Davis & Co.	Cover II
Pitman-Moore Division, Dow Chemical Co.	577
Plainwell Sanitarium	595
Professional Management	595
Roche Laboratories	Cover IV
Sammond Pleasant Lodge	516
Sanborn Division, Hewlett Packard Co.	564
Searle, G. D. & Co.	558, 559
Smith Kline & French Laboratories	593
Stratton, Ben P.	562
Squibb	525, 573
Tutag, S. J. & Co.	568
Wallace Laboratories	515, 563
Winthrop Laboratories	510

PROFESSIONAL MANAGEMENT • FOR PHYSICIANS AND DENTISTS
since 1932
PM®

Professional Management

BLACK AND SKAGGS ASSOCIATES
Battle Creek, Michigan
Affiliated Offices
Battle Creek - - - Detroit
Grand Rapids - - - Saginaw
Traverse City - - - Berkley

"SERVING THE MICHIGAN PHYSICIANS FOR OVER 30 YEARS"

PRESIDENT'S
PAGE

County Medical Society

It has been my pleasure to attend quite a few county medical society meetings this year, and to receive correspondence from many more.

Constantly, I am amazed at the quality of the community service projects carried out by the county components. As examples, let me mention only a few—the Health Fair at Muskegon, the Career Programs in Calhoun, the Doctor-Clergy Discussions in Washtenaw, the Tetanus Project in Lenawee, the Library Projects in Kent, etc., etc.

Many, many physicians are cooperating to enable the county medical societies to carry out all of these vital projects.

It is through such group activities and communications that our local communities grow. The freedom of individual action—the chance for a physician to contribute in a project and the chance for the resident to participate—is essential.

For the county medical societies to continue as positive forces in the shaping of the local communities, the physician members need to adopt several propositions:

A. The county medical society must identify itself with the interests of the Community—with the health, economic, governmental, educational, political, moral, mental issues.

B. The country medical society must carefully evaluate the community's real needs and decide what distinctive role the physician can play.

C. Once the county medical society has decided on the nature and scope of its work, it must plan carefully and carry out the project to the best of its ability.

D. Good community relations cannot be maintained by one county society officer or one committee, all members must work together.

E. While good community relations cannot be built upon gimmicks, gifts and ballyhoo, the county medical society must remember that public relations in a simplified way is nothing more than "doing good and telling people about it."

All of you recognize I am sure that a county medical society—along wit MSMS and the AMA—must earn its recognition as a group of compe tent professional men who willingly meet their responsibilities as goo citizens. Civic service by the county units and the individual physicia will be satisfying; and will be appreciated by the general citizenry of th community.

Keep up the good work.

Luther R. Leader M.D.

ꞁlood-glucose ꞁcreening for all ꞁour patients?

ecause "Abnormalities of glucose abolism are among the [most nmon] encountered in clinical ctice...."* Simple, quick, econom- blood-glucose screening n DEXTROSTIX® Reagent Strips is cticable in every regular physical mination, emergency situation, whenever hypo- or hyper- cemia may be of clinical nificance—for "The precision accuracy of DEXTROSTIX neet the need for an always ilable simple screening hod...."* All that is required screening with TROSTIX is 60 seconds a globular drop of illary or venous blood. normal readings will be luable aid to diagnosis; mals will help you ablish an important eline for future reference.

ks, V., and Dawson, A.:
M. J. 1:293, 1965.

EXTROSTIX—
vides a clinically useful ermination when performed ording to directions†

TROSTIX is not intended to replace nore precise analytical laboratory methods.

'es—all your patients

AMES COMPANY, INC.
Elkhart, Indiana

AMES

09165

when anxiety is part of the clinical picture

Librium®

(chlordiazepoxide HCl)

In prescribing: Dosage — Adults Mild to moderate anxiety and tension, 5 or 10 mg t.i.d. or q.i.d.; severe states, 20 or 25 mg t.i.d. or q.i.d. Geriatric patients 5 mg b.i.d. to q.i.d.
Side Effects: Side effects, usually dose-related, include drowsiness, ataxia, minor skin rashes, edema, menstrual irregularities, nausea and constipation. When treatment is protracted, blood counts and liver function tests are advisable. Paradoxical reactions may occasionally occur in psychiatric patients. Individual maintenance dosages should be determined.
Precautions: Advise patients against possibly hazardous procedures until maintenance dosage is established. Though compatible with most drugs, use care in combining with other psychotropics, particularly MAO inhibitors or phenothiazines; warn patients of possible combined effects with alcohol. Observe usual precautions in impaired renal or hepatic function, in long-term treatment and in presence of depression or suicidal tendencies. Exercise caution in administering drug to addiction-prone patients or those who might increase dosage, withdrawal symptoms, similar to those seen with barbiturates or meprobamate, can occur upon abrupt cessation after prolonged overdosage. Caution should be exercised in prescribing any therapeutic agent for pregnant patients.
Supplied: Capsules, 5 mg, 10 mg and 25 mg, bottles of 50.

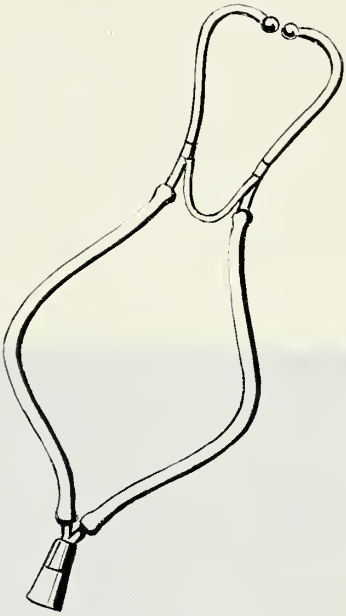
Roche Laboratories • Division of Hoffmann-La Roche Inc • Nutley, N J. 07110

ROCHE

AUGUST, 1966 — PUBLISHED MONTHLY

MICHIGAN MEDICINE

MICHIGAN STATE MEDICAL SOCIETY



The vital role of the physician in football and in all other organized athletics is being stressed by MSMS during August and September. County medical societies will sponsor conferences for coaches, team doctors and school officials on the "Medical Aspects of High School Sports," and they will also honor veteran team physicians. MSMS will take the leadership with special articles for newspapers and magazines, with radio and television programs and with other educational efforts. "Michigan Medicine" readers will find pertinent articles in this issue and in the September number.

U.C. MEDICAL CENTER LIBRARY
AUG 18 196
San Francisco 22,

Dilantin®
(diphenylhydantoin)

PARKE-DAVIS

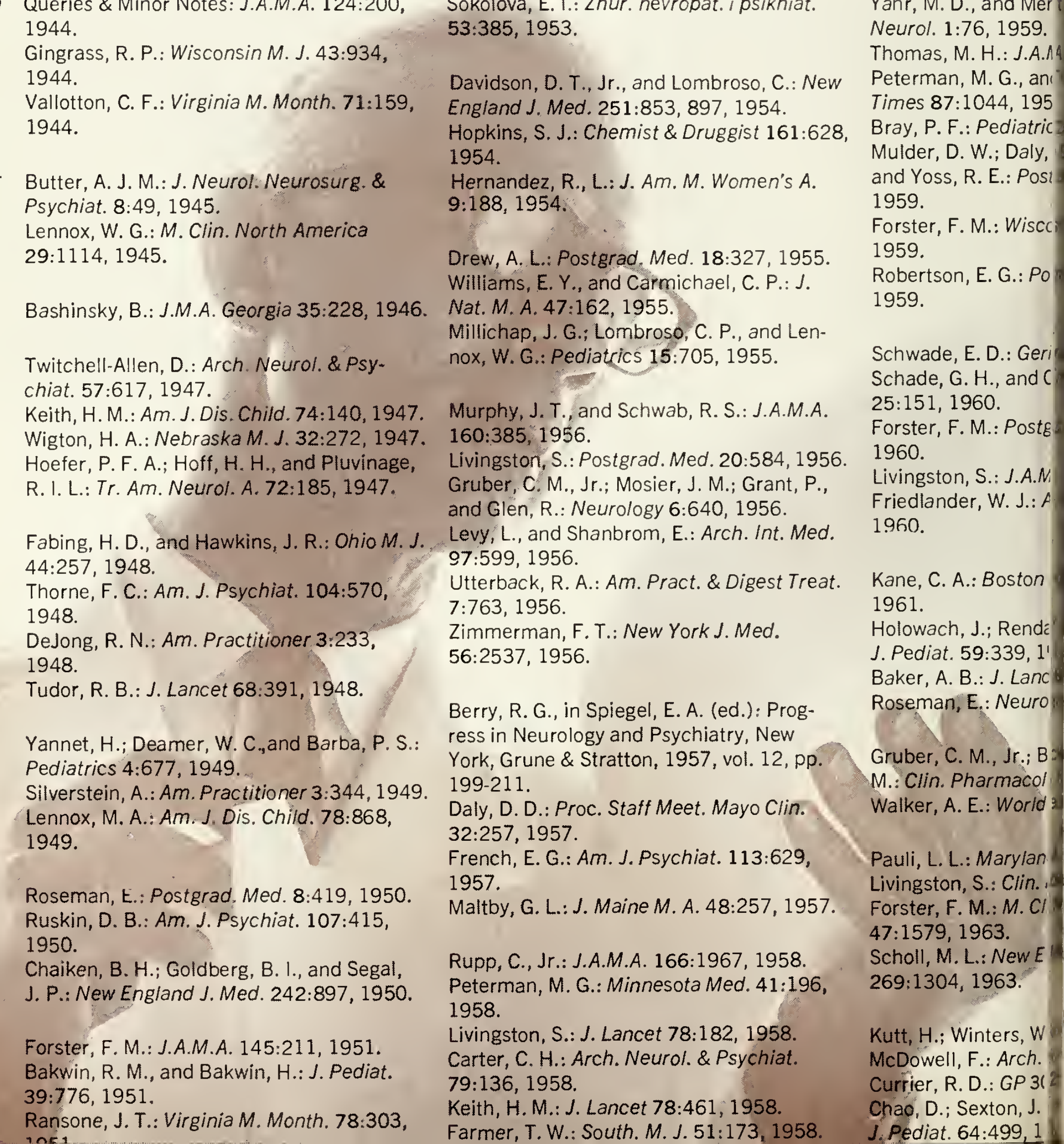
27 years of clinical use... and still the most widely prescribed agent of its kind

Complete information for usage available to physicians on request.
81966

PARKE-DAVIS

PARKE, DAVIS & COMPANY, Detroit, Michigan 48232

1866 1966 100th ANNIVERSARY



Reese, H. H.: *Wisconsin*
J. 15:344, 1939.
igan M. Soc. 38:317,
oran, T. H.: *Ann. Int.*
tnam, T. J.: *Arch. Neu-*
053, 1939.
Sc. 85:986, 1939.
, D. L., Jr., and Arnold,
nth. 66:522, 1939.
Osgood, R.: *J.A.M.A.*
nnett, C. L.: *Psychiat.*
Washington Bull. 3:16.
ldstein, H. H.: *Am. J.*
940.
son, V.: *Ann. Int. Med.*
M.A.J. 43:157, 1940.
ulane Med. Fac. 1:2,
Times 69:461, 1941.
Shallenberger, D. W.:
383, 1941.
Bull. Veterans Admin.
t 61:178, 1941.
ec. 155:105, 1942.
. J. Psychiat. 98:515,
.A. 120:449, 1942.
J. Psychiat. 99:231,
nes 70:244, 1942.
renner, C.: *J. Nerv. &*
942.
ieff, A. J.: *J.A.M.A.*

Queries & Minor Notes: *J.A.M.A.* 124:200, 1944.
Gingrass, R. P.: *Wisconsin M. J.* 43:934, 1944.
Vallotton, C. F.: *Virginia M. Month.* 71:159, 1944.

Butter, A. J. M.: *J. Neurol. Neurosurg. & Psychiat.* 8:49, 1945.
Lennox, W. G.: *M. Clin. North America* 29:1114, 1945.

Bashinsky, B.: *J.M.A. Georgia* 35:228, 1946.

Twitchell-Allen, D.: *Arch. Neurol. & Psychiat.* 57:617, 1947.
Keith, H. M.: *Am. J. Dis. Child.* 74:140, 1947.
Wigton, H. A.: *Nebraska M. J.* 32:272, 1947.
Hoefer, P. F. A.; Hoff, H. H., and Pluvinage, R. I. L.: *Tr. Am. Neurol. A.* 72:185, 1947.

Fabing, H. D., and Hawkins, J. R.: *Ohio M. J.* 44:257, 1948.
Thorne, F. C.: *Am. J. Psychiat.* 104:570, 1948.
DeJong, R. N.: *Am. Practitioner* 3:233, 1948.
Tudor, R. B.: *J. Lancet* 68:391, 1948.

Yannet, H.; Deamer, W. C.,and Barba, P. S.: *Pediatrics* 4:677, 1949.
Silverstein, A.: *Am. Practitioner* 3:344, 1949.
Lennox, M. A.: *Am. J. Dis. Child.* 78:868, 1949.

Roseman, E.: *Postgrad. Med.* 8:419, 1950.
Ruskin, D. B.: *Am. J. Psychiat.* 107:415, 1950.
Chaiken, B. H.; Goldberg, B. I., and Segal, J. P.: *New England J. Med.* 242:897, 1950.

Forster, F. M.: *J.A.M.A.* 145:211, 1951.
Bakwin, R. M., and Bakwin, H.: *J. Pediat.* 39:776, 1951.
Ransone, J. T.: *Virginia M. Month.* 78:303,

Sokolova, E. I.: *Zhur. nevropat. i psikhiat.* 53:385, 1953.

Davidson, D. T., Jr., and Lombroso, C.: *New England J. Med.* 251:853, 897, 1954.
Hopkins, S. J.: *Chemist & Druggist* 161:628, 1954.
Hernandez, R., L.: *J. Am. M. Women's A.* 9:188, 1954.

Drew, A. L.: *Postgrad. Med.* 18:327, 1955.
Williams, E. Y., and Carmichael, C. P.: *J. Nat. M. A.* 47:162, 1955.
Millichap, J. G.; Lombroso, C. P., and Lennox, W. G.: *Pediatrics* 15:705, 1955.

Murphy, J. T., and Schwab, R. S.: *J.A.M.A.* 160:385, 1956.
Livingston, S.: *Postgrad. Med.* 20:584, 1956.
Gruber, C. M., Jr.; Mosier, J. M.; Grant, P., and Glen, R.: *Neurology* 6:640, 1956.
Levy, L., and Shanbrom, E.: *Arch. Int. Med.* 97:599, 1956.
Utterback, R. A.: *Am. Pract. & Digest Treat.* 7:763, 1956.
Zimmerman, F. T.: *New York J. Med.* 56:2537, 1956.

Berry, R. G., in Spiegel, E. A. (ed.): Progress in Neurology and Psychiatry, New York, Grune & Stratton, 1957, vol. 12, pp. 199-211.
Daly, D. D.: *Proc. Staff Meet. Mayo Clin.* 32:257, 1957.
French, E. G.: *Am. J. Psychiat.* 113:629, 1957.
Maltby, G. L.: *J. Maine M. A.* 48:257, 1957.

Rupp, C., Jr.: *J.A.M.A.* 166:1967, 1958.
Peterman, M. G.: *Minnesota Med.* 41:196, 1958.
Livingston, S.: *J. Lancet* 78:182, 1958.
Carter, C. H.: *Arch. Neurol. & Psychiat.* 79:136, 1958.
Keith, H. M.: *J. Lancet* 78:461, 1958.
Farmer, T. W.: *South. M. J.* 51:173, 1958.

Yahr, M. D., and Mer
Neurol. 1:76, 1959.
Thomas, M. H.: *J.A.M*
Peterman, M. G., an
Times 87:1044, 195
Bray, P. F.: *Pediatric*
Mulder, D. W.; Daly,
and Yoss, R. E.: *Post*
1959.
Forster, F. M.: *Wisc*
1959.
Robertson, E. G.: *Po*
1959.

Schwade, E. D.: *Geri*
Schade, G. H., and C
25:151, 1960.
Forster, F. M.: *Postg*
1960.
Livingston, S.: *J.A.M*
Friedlander, W. J.: *A*
1960.

Kane, C. A.: *Boston*
1961.
Holowach, J.; Renda
J. Pediat. 59:339, 1
Baker, A. B.: *J. Lanc*
Roseman, E.: *Neuro*

Gruber, C. M., Jr.; B
M.: *Clin. Pharmacol*
Walker, A. E.: *World*

Pauli, L. L.: *Marylan*
Livingston, S.: *Clin.*
Forster, F. M.: *M. Cl*
47:1579, 1963.
Scholl, M. L.: *New E*
269:1304, 1963.

Kutt, H.; Winters, W
McDowell, F.: *Arch.*
Currier, R. D.: *GP* 3
Chao, D.; Sexton, J.
J. Pediat. 64:499, 1

to help restore
and stabilize the
intestinal flora

LACTINEX®

TABLETS & GRANULES

for fever blisters
and canker sores
of herpetic origin

LACTINEX contains a standardized viable mixed culture of *Lactobacillus acidophilus* and *L. bulgaricus* with the naturally occurring metabolic products produced by these organisms.

LACTINEX was introduced to help restore the flora of the intestinal tract in infants and adults.[1,2,3,4]

LACTINEX has also been shown to be useful in the treatment of fever blisters and canker sores of herpetic origin.[5,6,7,8]

No untoward side effects have been reported to date.

Literature on indications and dosage available on request.

**HYNSON, WESTCOTT
& DUNNING, INC.**

BALTIMORE, MARYLAND 21201

(LX03)

nces: (1) Siver, R. H.: CMD, *21*:109, September
(2) Frykman, H. H.: Minn. Med., *38*:19-27,
y 1955. (3) McGivney, J.: Tex. State Jour. Med.,
18, January 1955. (4) Quehl, T. M.: Jour. of
a Acad. Gen. Prac., *15*:15-16, October 1965. (5)
es, D. J.: N.Y. State Jour. Med., *58*:2672-2673, August 1958. (6) Weekes, D. J.: EENT Digest, *25*:47-59, December 1963. (7) Abbott, P. L.: Jour. Oral Surg., Anes., & Hosp. Dental Serv., 310-312, July 1961. (8) Rapoport, L. and Levine, W. I.: Oral Surg., Oral Med. & Oral Path., *20*:591-593, November 1965.

LX

Winthrop announces
new
WinGel®
ANTACID
TABLETS
AND LIQUID

For peptic ulcer,
gastric hyperacidity,
gastritis

Each WinGel tablet or teaspoon (5 ml.) contains 410 mg. of combined, highly reactive, short polymer, aluminum and magnesium hydroxides **stabilized with hexitol.**

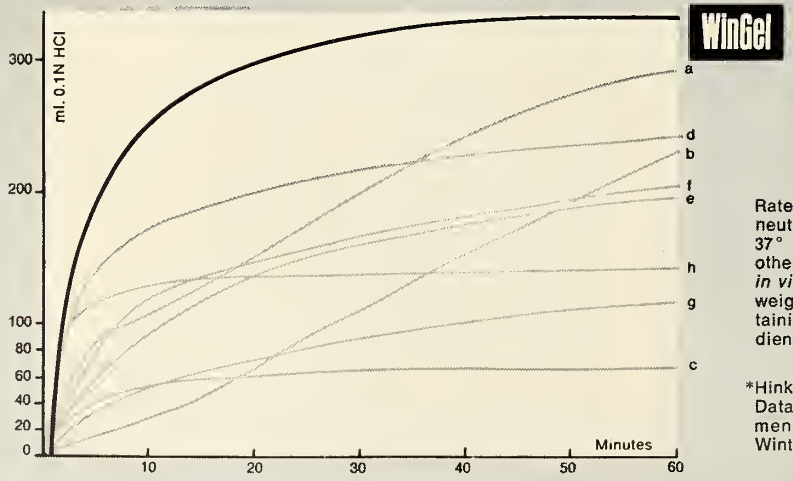
Neutralizes 300 times its active-ingredient weight in gastric acid for fast, long-lasting relief

Gastric or duodenal ulcer, acute or chronic gastritis, gastric hyperacidity...wherever there is "acid overflow" new WinGel can provide faster, longer, more complete neutralization.

In recent laboratory comparisons* with eight other leading antacids, new WinGel tablets not only neutralized more hydrochloric acid per active-ingredient weight, but neutralized it faster and longer than all other antacids tested.

Pleasant pink in color, WinGel is delicately mint flavored with a smooth-as-cream texture—qualities sure to please the patient on long-term therapy. New WinGel **is** also specially formulated to avoid constipation or diarrhea.

New WinGel neutralizes 300 times its active-ingredient weight in 0.1N hydrochloric acid—neutralizes more acid faster than other leading antacids



Rate of 0.1N hydrochloric acid neutralization at pH 3.5 and 37° with WinGel and eight other leading antacid tablets—*in vitro*. Samples equaled the weight of tablet material containing 1.0 Gm. active ingredients.*

*Hinkel, E. T., Jr. (New York): Data in the files of the Department of Medical Research, Winthrop Laboratories.

Dosage: Peptic ulcer or gastritis—from 2 to 4 teaspoons of WinGel liquid or 2 to 4 tablets chewed or allowed to dissolve in the mouth every two to four hours. **Gastric hyperacidity**—2 tablets or teaspoons about ½ to one hour after meals as needed; children from 7 to 14 years of age, 1 or 2 tablets or 1 or 2 teaspoons of liquid as needed.

How Supplied: Liquid in bottles of 8 fl. oz. and 1 pint. **Tablets** in cellophane strips, boxes of 50 and 100. (One teaspoon of WinGel liquid is equivalent to one WinGel tablet in acid-combining capacity.) WinGel, trademark reg. U.S. Pat. Off.

Winthrop Laboratories, New York, N.Y. 10016 Winthrop

Finally — a taste your patients will truly like

(1058M)

AUGUST, 1966
VOLUME 65, NUMBER 8
PUBLISHED MONTHLY BY
MICHIGAN STATE MEDICAL SOCIETY

MICHIGAN MEDICINE

EAST LANSING
MICHIGAN

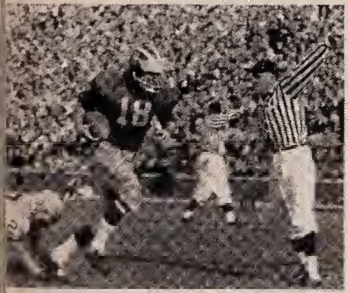
PUBLICATION COMMITTEE

radley M. Harris, m.d., Ypsilanti
Chairman
. C. Hansen, m.d., Battle Creek
. L. Masters, m.d., Fremont
. W. McLean, m.d., Detroit
. H. Rodda, m.d., Bay City
. J. Tallant, m.d., Detroit
ilton R. Weed, m.d., Grosse Pte. Park

cientific Editor
EORGE H. LOWREY, M.D.

anaging Editor
ERBERT A. AUER

SMS Executive Director and usiness Manager
UGH W. BRENNEMAN



The cover sketch (by Dar Davis, ast Grand Rapids art teacher) hows Rick Sygar scoring for the niversity of Michigan last year. ee Page 633 for article re Medicine nd Football.

ORIGINAL SCIENTIFIC ARTICLES

621 The Management of Severe Erythroblastosis In Utero/Robert B. Jaffe, M.D., Bruce Work, M.D., Colin Campbell, M.D., and Walter Whitehouse, M.D.

624 Restrictive Pericarditis: A New Complication of the Beck I Procedure/David K. Meriney, M.D.

629 Multiple Atheromatous Embolization After Aortic Surgery/F. Gonzales Crussi, M.D., Omero S. Iung, M.D., Robert G. Coombs, M.D., and William H. Meade, M.D.

634 XO/XY Mosaicism in a Profoundly Retarded Male/Zwi H. Hart, M.D., Cyrus W. Stimson, M.D., William F. Simpson, M.S., and Anthony Nolke, M.D.

SPECIAL ARTICLES

638 Know Common Poisonous Plants?
640 Water Through the Ages

STATE SOCIETY, 601, 603, 604, 609, 610, 612, 617, 618
BREAKING NEWS 641, 642, 643, 644
PERSONAL MENTION 645
VIEWPOINTS 649, 652, 653
ANCILLARY ACTIVITIES 656, 658, 659, 660, 662

ALSO:

664 In Memoriam
680 President's Page

Published monthly, except two extra issues to be published in October and December, by the Michigan State Medical Society s its official journal at 2642 University Ave., Saint Paul, Minn. 55114. Second class postage paid at Saint Paul, Minnesota. early subscription rate, $9.00; single copies, 80 cents. Additional postage: Canada, $1.00 per year; Pan-American Union, 2.50 per year; Foreign, $2.50 per year. Printed in USA. All communications relative to manuscripts, advertising, news, exhanges, etc., should be addressed to Publication Committee, Michigan State Medical Society, 120 West Saginaw Street, East ansing, Michigan 48824. © 1966 Michigan State Medical Society.

Anatomy of
Low Back Pain #1
the sedentary life
is often the seat of
low back pain

The human spine is not engineered
prolonged sitting at desks, pianos, ty
writers and drafting boards. The stress
set up by the heavy, forward-tilted he
and trunk, balanced precariously on
insufficient base, result in strain of t
dorsal musculature, particularly at t
low lumbar level.

The unusual muscle-relaxant and an
gesic properties of 'Soma' make it es
cially useful in the treatment of low ba
sprains and strains. 'Soma' is wid
prescribed ☐ **to relieve pain** ☐ **to rel**
muscles ☐ **to restore mobility.**

Indications: 'Soma' is useful for management
muscle spasm, pain, and stiffness in a variety
inflammatory, traumatic, and degenerative mus
loskeletal conditions. It also may act to norma
motor activity in certain neurologic disturbanc

Contraindications: Allergic or idiosyncratic re
tions to carisoprodol.

Precautions: 'Soma', like other central nerv
system depressants, should be used with caut
in patients with known propensity for taking
cessive quantities of drugs and in patients w
known sensitivity to compounds of similar che
cal structure, e.g., meprobamate.

Side Effects: The only side effect reported with
frequency is sleepiness, usually on higher th
recommended doses. An occasional patient r
not tolerate carisoprodol because of an individ
reaction, such as a sensation of weakness. Ot
rarely observed reactions have included dizzine
ataxia, tremor, agitation, irritability, headache,
crease in eosinophil count, flushing of face,
gastrointestinal symptoms.

One instance each of pancytopenia and leu
penia, occurring when carisoprodol was adm
istered with other drugs, has been reported, as
an instance of fixed drug eruption with carisopro
and subsequent cross reaction to meprobam
Rare allergic reactions, usually mild, have inclu
one case each of anaphylactoid reaction with m
shock and angioneurotic edema with respirat
difficulty, both reversed with appropriate thera
In cases of allergic or hypersensitivity reactio
carisoprodol should be discontinued and appro
ate therapy initiated. Suicidal attempts may p
duce coma and/or mild shock and respirat
depression.

Dosage: Usual adult dose is one 350 mg. tab
three times daily and at bedtime.

Supplied: Two Strengths: 350 mg. white tab
and 250 mg. orange, two-piece capsules.

Before prescribing, consult package circular.

for the relief
of low back
sprains and strain

SOMA
(CARISOPRODO

Wallace Laboratories, Cranbury, N.
26S

OFFICIAL CALL

The Michigan State Medical Society will convene in Annual Session in Grand Rapids, September 25-30, 1966. The provisions of the Constitution and Bylaws and the Official Program will govern the deliberations.

Luther R. Leader, M.D.
President
Harold H. Hiscock, M.D.
Council Chairman
J. J. Lightbody, M.D.
Speaker
Louis F. Hayes, M.D.
Vice Speaker

Slagle Elected Chairman Of Key AMA Council

George W. Slagle, M.D., Battle Creek, a MSMS Past President, is the new chairman of the AMA Council on Medical Services. He was elected by the Council to the chairmanship at the close of the ecent AMA Convention in Chicago.

The MSMS Delegation to the AMA conducted a vigourous campaign at the Chicago Convention o elect Dr. Slagle to the AMA Board of Trustees. An impressive brochure and many personal letters were mailed to the AMA delegates before the convention. At the convention, MSMS operated a hospitality suite, distributed about 400 plastic automobiles, and talked about Dr. Slagle to the delegates. The nomination speech was very effectively made by Donald Sweeny, Jr., M.D. Four names were offered for the vacancy sought by the Michigan nominee.

The delegates, who had just elected three unopposed candidates from the Midwest for other positions, chose Max H. Parrott, of Portland, Oregon, for that vacancy.

* * *

A NATIVE OF MICHIGAN—Charles L. Hudson, M.D.—was installed as the 121st president of the AMA. Now of Cleveland, Dr. Hudson was born at Merrill and was graduated from Alma College and he University of Michigan Medical School.

In his inaugural address, Dr. Hudson recommended o his colleagues to "demonstrate the competency of he private field of medicine to perform all necessary echnical, professional, and administrative services . . . giving the United States the high quality medical care not only envied but unsurpassed throughout the world."

Another field in which the medical profession should demonstrate its competency, Dr. Hudson said, is in an appraisal of medical manpower and its relationship to service demands.

The Michigan native urged physicians "to do everything we can to arrest the trend toward dependency on government, particularly where medicine is concerned, and in all other fields wherever possible. Complete dependency weakens the resolve for self-help and fosters in citizens a false sense of entitlement to goods and services."

The AMA delegates also heard Dr. Hudson suggest that the government be encouraged "to confine its activities—in the organization of health services for those who are not its wards or dependents—to the stimulation and support of private enterprise, rather than undertaking specific operational and directorial capacities."

In another proposal for action, Dr. Hudson urged AMA members to continue to "offer our government the knowledge and the competency of the health professions in consultation and cooperation, acting as free, strong, independent agencies, not as extensions of the government. I believe it was the intention of our nation's founding fathers that there be interaction between the government and the governed. I believe that such interaction should be conscientiously preserved and should never end."

* * *

SEVERAL MICHIGAN physicians were among the winners announced at the AMA convention by the Scientific Awards Committee.

Certificates of Merit and Honorable Mention, awarded to the best exhibits in each section, to the following Michigan physicians:

Section on Internal Medicine: A Certificate of Merit was awarded to Edward L. Moorhead, II, M.D., Joseph H. Elliott, M.D., John R. Caldwell, M.D., D. Emerick Szilagyi, M.D., and Silvio Salerno, M.D., Henry Ford Hospital, Detroit, for the exhibit on Diagnosis and Treatment of Pheochromocytoma.

Section on Orthopedic Surgery: A Certificate of Merit was awarded to Harold M. Foster, M.D., Henry Ford Hospital, Detroit, for the exhibit on Cellular Mechanisms in Disease.

Arthritis and Rheumatism Exhibit Symposium: A Certificate of Merit was awarded to Gilbert B. Bluhm, M.D., Jeanne M. Riddle, Ph.D., and Marion I. Barnhart, Ph.D., Henry Ford Hospital and Wayne State University School of Medicine, Detroit, for the exhibit on Inflammatory Dynamics in the Rheumatoid Joint.

Diagnosis:

cystitis?
pyelonephritis?
pyelitis?
urethritis?
prostatitis?

in any case,
usually gram-negative*

Therapy:

two 500 mg. Caplets® q.i.
(initial adult dose)

Indications: Urinary tract infections caused by gram-negative and some gram-positive organisms.

Side effects: Mainly mild, transient gastrointestinal disturbances; in occasional instances, drowsiness, fatigue, pruritus, rash, urticaria, mild eosinophilia, reversible subjective visual disturbances (overbrightness of lights, change in visual color perception, difficulty in focusing, decrease in visual acuity and double vision), and reversible photosensitivity reactions. Marked overdosage, coupled with certain predisposing factors, has produced brief convulsions in a few patients.

Precautions: As with all new drugs, blood and liver function tests are advisable during prolonged treatment. **Pending further experience, like most chemotherapeutic agents, this drug should not be given in the first trimester of pregnancy. It must be used cautiously in patients with liver disease or severe impairment of kidney function.** Because photosensitivity reactions have occurred in a small number of cases, patients should be cautioned to avoid unnecessary exposure to direct sunlight while receiving NegGram, and if a reaction occurs, therapy should be discontinued. The dosage recommended for adults and children should not arbitrarily be doubled unless under the careful supervision of a physician. Bacterial resistance may develop.

When testing the urine for glucose in patients receiving NegGram, Clinistix® Reagent Strips or Tes-Tape® should be used since other reagents give a false-positive reaction.

Dosage: Adults: Four Gm. daily by mouth (2 Caplets® of 500 mg. four times daily) for one to two weeks. Thereafter, if prolonged treatment is indicated, the dosage may be reduced to two Gm. daily. Children may be given approximately *25 mg. per pound* of body weight per day, administered in divided doses. The dosage recommended above for adults and children should not arbitrarily be doubled unless under the careful supervision of a physician. Until further experience is gained, infants under 1 month should not be treated with the drug.

How supplied: Buff-colored, scored Caplets® of **500 mg. for adults**, conveniently available in bottles of 56 (sufficient for one full week of therapy) and in bottles of 1000. **250 mg. for children**, available in bottles of 56 and 1000.

References: (1) Based on 23 clinical papers, 1512 cases. Bibliography on request. (2) Bush, I. M., Orkin, L. A., and Winter, J. W., in Sylvester, J. C.: Antimicrobial Agents and Chemotherapy—1964, Ann Arbor, American Society for Microbiology, 1965, p. 722.

Winthrop
Winthrop Laboratories, New York, N. Y. 10016

NegGram
Brand of
nalidixic aci

a specific anti-gram-negative

eradicates most urinary tract infections...

- Low incidence of untoward effects; no fungal overgrowth, crystalluria, ototoxic or nephrotoxic effects have been observed.
- "Excellent" or "good" response reported *in more than 2 out of 3* patients with either chronic or acute gram-negative infections.[1]

*As many as 9 out of 10 urinary tract infections are now caused by gram-negative organisms: E. coli, Klebsiella, Aerobacter, Proteus, Paracolon or Pseudomonas[2]... However, infections of the urethra and prostate caused by non-gonococcal gram-negative organisms are believed to be less prevalent.

ORDER OF BUSINESS FOR 1966 MSMS HOUSE OF DELEGATES

SUNDAY, SEPTEMBER 25

Grand Ballroom, Pantlind Hotel, Grand Rapids

6:00 p.m.—REGISTRATION

Speaker's Dinner with Reference Committee
Directors' Room

8:00 p.m.—FIRST MEETING

1. Call to Order by Speaker
2. Report of Committee on Credentials
3. Appointment of Reference Committees
4. Speaker's Remarks—J. J. Lightbody, M.D., Detroit
5. Reports of House of Delegates Committees on Certificates of Commendation and Michigan's Outstanding Physician
6. Introduction of Resolutions

* * *

MONDAY, SEPTEMBER 26

8:30 a.m.—SECOND MEETING

7. Supplemental Report of Committee on Credentials
8. Introduction of Resolutions
9. President's Address — Luther R. Leader, M.D., Royal Oak
10. President-Elect's Address — C. A. Payne, M.D., Grand Rapids
11. Greetings of Woman's Auxiliary — Mrs. Rufus H. Reitzel, Mt. Clemens, President
12. Greetings of Michigan State Medical Assistants Society — Mrs. Nita Ferman, Jackson, President
13. Annual Report of The Council (including Annual Report of Committees of The Council)—Harold H. Hiscock, M.D., Flint, Chairman of The Council
14. Report of Delegates to American Medical Association—George W. Slagle, M.D., Battle Creek
15. Report of Michigan Medical Service—John M. Wellman, M.D., Lansing, President
16. Reports of Committees of the House of Delegates:
    - (a) Committee on Certificates of Commendation
    - (b) Committee on Constitution and Bylaws
    - (c) Committee to Determine Monetary Value of Unit of Relative Value Scale
    - (d) Committee on Reapportionment
    - (e) Committee to Select Michigan's Outstanding Physician
    - (f) Committee to Study Financial Structure of MSMS
    - (g) Committee to Study Multi-County Medical Societies
    - (h) Committee to Study Procedures of House of Delegates
17. Reports of MSMS Standing and Special Committees

1:30 p.m. REFERENCE COMMITTEE MEETING

8:00 p.m.—THIRD MEETING

18. Supplemental Report of Committee on on Credentials
19. Unfinished Business
20. Introduction of Resolutions; Other New Business
21. Reports of Reference Committees

TUESDAY, SEPTEMBER 27

8:30 a.m.—FOURTH MEETING

22. Supplemental Report of Committee on Credentials
23. Reports and Supplemental Reports of Reference Committees
24. Unfinished Business
25. Introduction of Resolutions; Other New Business

11:30 a.m.—PRESENTATIONS

26. Awards: "Michigan's Outstanding Physician"
    Certificates of Commendation
    Fifty Year Awards

8:00 p.m.—FIFTH MEETING

27. Supplemental Report of Committee on Credentials
28. Unfinished Business
29. Supplemental Reports of Reference Committees
30. Introduction of incoming President of MSMS, C. Allen Payne, M.D., Grand Rapids — Luther R. Leader, M.D., Royal Oak, President, MSMS
31. Elections:

    Councilors
    - 1st District—Edward J. Tallant, M.D., Detroit — Incumbent
    - 2nd District—Ross V. Taylor, M.D., Jackson — Incumbent
    - 3rd District—Harvey C. Hansen, M.D., Battle Creek — Incumbent
    - 9th District—Robert V. Daugharty, M.D., Cadillac — Incumbent
    - 11th District—Brooker L. Masters, M.D., Fremont — Incumbent
    - 13th District—D. Roemer Smith, M.D., Iron Mountain — Incumbent

    Delegates to American Medical Association:
    To fill vacancy by death of Wm. A. Hyland, M.D., Grand Rapids
    - Sidney Adler, M.D., Detroit—Incumbent
    - Ralph R. Cooper, M.D., Detroit—Incumbent
    - George W. Slagle, M.D., Battle Creek—Incumbent
    - Donald N. Sweeny, Jr., M.D., Detroit—Incumbent

    Alternate Delegates to American Medical Association:
    - Oliver B. McGillicuddy, M.D., Lansing—Incumbent
    - Joseph A. Witter, M.D., Highland Park —Incumbent
    - Vacancy
    - Vacancy

    President-Elect
    Speaker of the House of Delegates
    Vice Speaker of the House of Delegates
32. Introduction of the new MSMS President-Elect—C. Allen Payne, M.D., Grand Rapids, incoming President, MSMS
33. Adjournment

MSMS Delegates and Alternates For 1966 House of Delegates

OFFICERS

Speaker

James J. Lightbody, M.D., 501 David Whitney Bldg., Detroit

Vice Speaker

Louis F. Hayes, M.D., Gaylord

Immediate Past President

Oliver B. McGillicuddy, M.D., 1816 Michigan National Tower, Lansing

ALLEGAN

Gerald Vander Voord, M.D., 312 E. Plum Street, Wayland
Lewis F. Brown, M.D., 133 E. Allegan St., Otsego

ALPENA-ALCONA-PRESQUE ISLE

Frederick C. O'Dell, M.D., 110 W. Chisholm, Alpena
Edward A. Hier, M.D., 125 N. 2nd Ave., Alpena

BARRY

Robert J. Huebner, M.D., 110 W. Center St., Hastings
Wesley G. Logan, M.D., City Bank Building, Hastings

BAY-ARENAC-IOSCO

William G. Gamble, Jr., M.D., 101 W. John Street, Bay City
Robert C. Prophater, M.D., 101 W. John Street, Bay City
Joseph E. Loree, M.D., 1407 Center, Bay City

BERRIEN

Paul O. Rague, M.D., Memorial Hospital, St. Joseph
Frederick H. Lindenfeld, M.D., 8 North St. Joseph, Niles
Noel J. Hershey, M.D., 122 Grant, Niles
F. Alan Kennedy, M.D., 315 Fidelity Building, Benton Harbor

BRANCH

Robert M. Leitch, M.D., 403 Ann Street, Union City
James M. Burke, M.D., 40 Balfour Drive, Coldwater

CALHOUN

Keith S. Wemmer, M.D., 1472 W. Michigan Ave., Battle Creek
Russell C. Rowan, M.D., 500 S. Ionia Street, Albion
George T. Kelleher, M.D., 235 North Ave., Battle Creek
Alfred G. McCuaig, M.D., 719 Capitol St., SW, Battle Creek
David E. Boswell, M.D., 105 N. Jefferson, Marshall
Salvatore A. Yanitelli, M.D., 710 North Ave., Battle Creek

CASS

Uriah M. Adams, M.D., Marcellus
Sherman L. Loupee, M.D., 108 Orchard Street, Dowagiac

CHIPPEWA-MACKINAC

Donald D. Finlayson, M.D., 302 E. Spruce Street, Sault Ste. Marie
William F. Mertaugh, M.D., Central Savings Bank Bldg., Sault Ste. Marie

CLINTON

Franklin W. Smith, M.D., 205 W. State Street, St. Johns
James M. Grost, M.D., 110 Oakland Street, St. Johns

DELTA-SCHOOLCRAFT

Merle E. Wehner, M.D., 131 River Street, Manistique
Donald N. Fitch, M.D., 804 Ludington Street, Escanaba

DICKINSON-IRON

Donald T. Anderson, M.D., Dickinson Memorial Hosp., Iron Mountain
William G. Gladstone, M.D., 804 Main Street, Norway

EATON

Byron P. Brown, M.D., 339 S. Cochran Ave., Charlotte
Clayton O. Willits, M.D., 127 Upland St., Charlotte

GENESEE

Clifford W. Colwell, M.D., 328 S. Saginaw Street, Flint 3
Ernest P. Griffin, M.D., 1505 Arrow Lane, Flint 7
Franklin W. Baske, M.D., 923 Maxine Street, Flint 3
Philip K. Stevens, M.D., 1116 Mott Foundation Building Flint
H. Maxwell Golden, M.D., 218 E. Court Street, Flint 3
John Quin, Jr., M.D., 2765 Flushing Road, Flint 4
Robert M. Weber, M.D., 3710 Davison Road, Flint 6
Richard J. McMurray, M.D., 2765 Flushing Road, Flint
Charles A. Thompson, M.D., 4211 Comstock Street, Flint
Glenn E. Moore, M.D., 323 West Second, Flint 3
Vernon C. Urich, M.D., 3169 West Pierson Road, Flint

GOGEBIC

John R. Franck, M.D., 401 Sunday Lake, Wakefield

GRAND TRAVERSE-LEELANAU-BENZIE

Frank H. Power, M.D., 116 Cass Street, Traverse City
Donald G. Pike, M.D., 1105 E. Front Street, Traverse Cit

GRATIOT-ISABELLA-CLARE

John M. Wood, M.D., 314 S. Brown, Mt. Pleasant
Donald K. Barstow, M.D., 215 West Saginaw, St. Louis

HILLSDALE

Clark B. Smith, M.D., 36 Highland, Hillsdale
Luther W. Day, M.D., 112 E. Chicago, Jonesville
Arthur W. Strom, M.D., 141 Budlong, Hillsdale

HOUGHTON-BARAGA-KEWEENAW

Paul S. Sloan, M.D., 609 Sheldon Ave., Houghton
Henry J. Winkler, M.D., Baraga County Memorial Hospital L'Anse

HURON

Charles W. Oakes, Jr., M.D., Harbor Beach
Edward E. Steinhardt, M.D., Box 15, Elkton 48731

INGHAM

Robert M. Stow, M.D., 2909 E. Grand River, Lansing
D. Bonta Hiscoe, M.D., 2909 E. Grand River, Lansing
Herbert W. Harris, M.D., 609 N. Washington Ave., Lansin
Henry E. Malcolm, M.D., 2909 E. Grand River Ave. Lansing
Lawrence A. Drolett, M.D., 3526 W. Saginaw St., Lansin
Charles O. Long, M.D., 2909 E. Grand River, Lansing
Thomas C. Blair, M.D., 1322 E. Michigan Ave., Lansing
Joseph R. Cipparone, M.D., St. Lawrence Hospital, Lansin
Richard S. Johnson, M.D., 521 N. Capitol, Lansing
Donald B. Moore, M.D., 1322 E. Michigan Ave., Lansin

IONIA-MONTCALM

Robert E. Rice, Memorial Clinic, Greenville
Richard E. Campbell, 111 N. Kidd, Ionia

JACKSON

Francis P. McQuillan, M.D., 611 Center St., Jackson
Harold L. Oster, M.D., 1218 Greenwood, Jackson
Woodward A. Wickham, M.D., 2029 Fourth, Jackson
Robert J. Kobs, M.D., 720 W. Franklin, Jackson

KALAMAZOO

Edwin O. Pearson, M.D., 458 W. South Street, Kalamazo
W. Kaye Locklin, M.D., 1410 American National Ban Bldg., Kalamazoo
Frederick C. Ryan, M.D., 1631 Gull Road, Kalamazoo
Frederick J. Margolis, M.D., 2901 S. Westnedge, Kalamazo
Russell M. Cashen, M.D., 403 Bronson Medical Cente Kalamazoo
Robert R. Dew, M.D., 1711 Merrill Street, Kalamazoo
A. John Neerken, M.D., 404 Bronson Medical Cente Kalamazoo
Robert H. Hume, M.D., 1711 Merrill Street, Kalamazoo

KENT

Fred C. Brace, M.D., 1498 Lake Drive, SE, Grand Rapid 49506
Allison R. Vanden Berg, M.D., 833 Lake Drive, SE, Gran Rapids 49506
Noyes L. Avery, Jr., M.D., 515 Lakeside Drive, SE, Gran Rapids 49506

(Continued on Page 609.)

summer 1966

DORSEY Season

A journal within a journal published quarterly in the interests of better medicine by Dorsey Laboratories, a division of The Wander Company, Lincoln, Nebraska. Address communications to Raymond C. Pogge, M.D., Director of Medicine.

this issue: emergency anesthesia and the common cold

When emergency anesthesia is complicated by the common cold

Barry Belonsky, M.D., F.A.C.A.
Staff Anesthesiologist, Hospital of The Albert Einstein College of Medicine, New York City

Medical facilities are often presented with unfamiliar patients who have unknown health histories. This is particularly true in emergency situations that arise due to accidents or acute illnesses. These cases may need prompt care requiring anesthesia, and if they involve colds, nasal allergies or other upper respiratory infections, can account for many complications which make up a major hazard during emergency anesthesia.

Administration of general anesthesia to a patient with a cold or upper respiratory infection is a hazardous undertaking. It should be avoided if at all possible. Indeed, the presence of U.R.I. is good reason for postponement of elective surgery.[1] In emergency surgery, regional or local block should be considered, but if general anesthesia is mandatory, it should be approached with utmost caution.

Since the attitude of "emergency surgery — hurry" has been replaced by "emergency surgery — watch out",[2] a knowledge of the complications is a great help in preventing them. Here is a brief outline of the problems involved and their treatment. Prevention of the complications is discussed later.

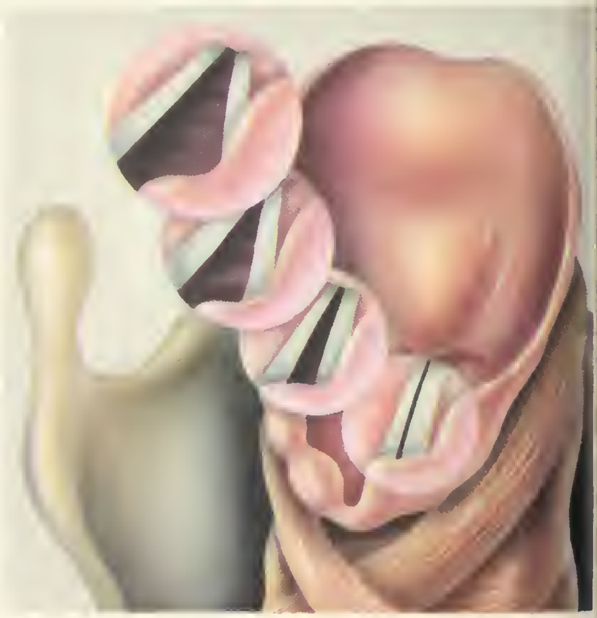
Complications during the induction of anesthesia

Most of the complications are a direct result of secretions and some a result of accompanying secondary infection. For example, *airway obstruction* due to excessive secretions occurs very commonly and is the direct effect of the cold. Respiratory exchange may be obstructed at any time during anesthesia because of excessive secretions, but is most likely to occur during induction. Suction apparatus must be available to overcome this.[3]

Excess secretions which stimulate and irritate the epiglottis and vocal chords can cause *laryngeal stridor and obstruction.* This can lead to complete laryngeal closure with resultant anoxia and death. *Bronchospasm and laryngospasm* can result fro secretions penetrating the bronchi and bronchiol In laryngospasm, there are both inspiratory and e piratory stridor and difficulty in inflating the ches in bronchospasm there is an expiratory wheeze, bu not as much difficulty in inflation, although som resistance may be felt. Stridor is due to partial o complete closure of the vocal cords in spasm and th "crowing" sound is almost pathognomonic.

Secretions obstruct the nasal airways. This produc *difficulty in ventilation* through the mouth until th patient is deep enough to place an oral airway. A intravenous agent can be given to facilitate the i duction of anesthesia.

Difficulties can arise if intubation is performed t ventilate the patient. For example, teeth can b broken by too vigorous attempts at intubation, o the intubation itself may be technically difficult du to secretions obstructing the view of the glottis. Th postoperative sequelae of intubation ranges fro mild laryngitis to pneumonia with atelectasis, an are seen far more commonly in patients sufferin from colds than in normal patients.



Successive stages of laryngospasm which produce the ch acteristic stridor or "crowing" sound.

Progression of bronchioles into bronchospasm.

Complications during the maintenance of anesthesia

Bronchospasm can occur in an unintubated patient due to secretions entering the bronchial tree from above, and acting as an irritant to the bronchi and bronchioles. Secretions accumulate quickly and the patient has to be suctioned continually. The whole cycle of coughing, bucking, laryngospasm and bronchospasm may ensue. The difficult decision here is whether it is better to suction the patient continually or to use an endotracheal tube which protects the cords and bronchi but introduces the risk of attendant complications.

Postoperative complications

Postoperatively, complications can be more serious than even the intra-anesthesia complications, and occur much more frequently in a patient who has been intubated.[4]

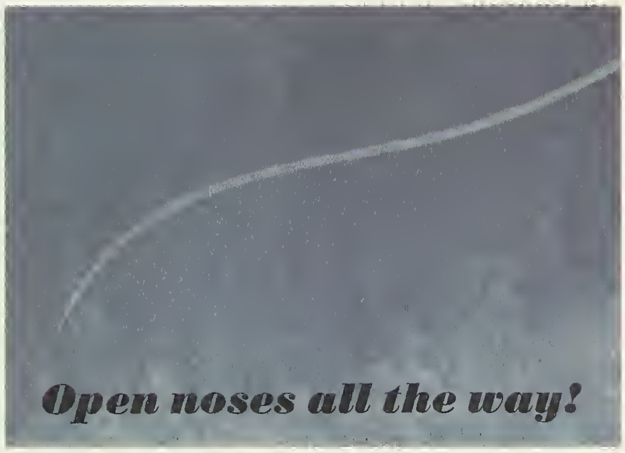
Sore throat and pharyngitis can result both from the preoperative upper respiratory infection and from the drying of the mucous membranes which occurs during anesthesia.

Tracheitis and bronchitis often result from secretions trickling down the tracheobronchial tree.

Laryngitis is frequently seen in patients with upper respiratory infections who have been intubated. There is a significant increase in the incidence of laryngitis compared to that in patients without upper respiratory infections.

Subglottic edema is a condition which occurs mainly in children who have been intubated. This pathology results from an exudate developing in the areolar tissue just below the cords. Because of the small size of the child's trachea, even a 1 mm increase in size of the mucous membrane can severely impair the air passage. Children exhibit this by severe expiratory stridor and may even become cyanotic. This may so severely embarrass the child's breathing that it must be treated vigorously. Most authorities agree on the treatment[5,6,7,8] consisting of a high oxygen concentration in the inspired air (60%), plus high humidity (close to 100%). Adequate parenteral fluid intake and slight cooling of the body temperature (by a cooled oxygen tent) also help in mild cases. In severe cases, there may be hypoxia which increases the restlessness and the oxygen demand rises. Sedation is often necessary, although concomitant depression of the respiratory center is undesirable. An antihistaminic accomplishes this purpose well, and adds sedation. Since there is always a possibility that an allergic response plays a role in edema, some relief of the respiratory distress may occur. Steroids should be used to control inflammatory and allergic phenomena and swelling. If all this fails, and the patient is still restless and hypoxic, a tracheostomy should be performed immediately.

(concluded on following page)



Your patient can breathe easily, flying from New York to Rome, on just one Triaminic timed-release tablet.

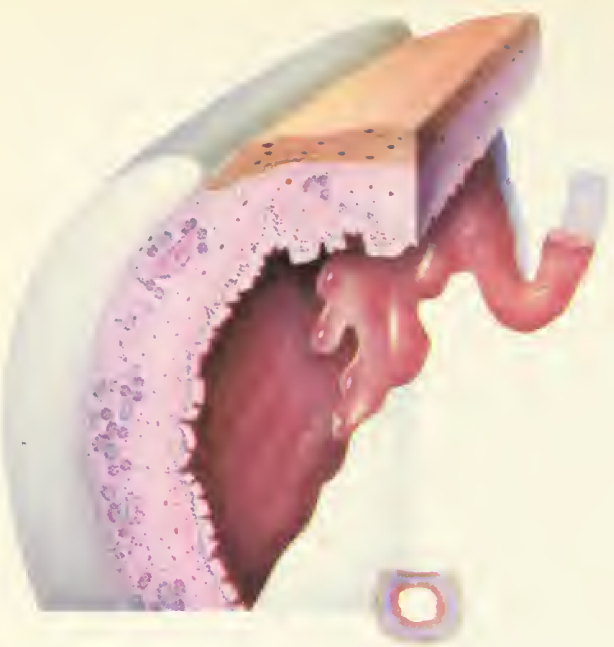
One tablet goes a long way. For 24 hour relief of nasal congestion and postnasal drip due to sinusitis, colds and respiratory allergies—simply prescribe one Triaminic timed-release tablet, swallowed whole, in morning, mid-afternoon and at bedtime.

Side Effects: Occasional drowsiness, blurred vision, cardiac palpitations, flushing, dizziness, nervousness, or gastrointestinal upsets. Precautions: The patient should be advised not to drive a car or operate dangerous machinery if drowsiness occurs. Use with caution in patients with hypertension, heart disease, diabetes or thyrotoxicosis.

Each **Triaminic**® timed-release tablet contains...

Phenylpropanolamine hydrochloride .... 50 mg.
Pheniramine maleate .... 25 mg.
Pyrilamine maleate .... 25 mg.

(Advertisement)



Cross section of trachea showing subglottic edema and lumen reduction due to mucous membrane congestion.

Pneumonia may also follow anesthesia administered to a patient with a cold. This can be caused by accumulated secretions becoming secondarily infected and causing consolidation of the lung. *Atelectasis* of the lung can result if one of the bronchioles becomes plugged by secretions, preventing aeration of the distal part of that lung. This is seen more frequently following upper respiratory infection because dry anesthetic gases aggravate the infection, causing secretions to change from watery to thick and viscid, and consequently difficult to suction.

Prevention of complications The first rule to prevent complications, of course, is to use a regional or local anesthesia whenever possible. But when emergency surgery is a must, in spite of the presence of a cold, allergy, or upper respiratory infection, here are some ways to prevent complications.

Give nose drops preoperatively. This can help shrink the congested nasal mucous membranes and reduce secretions for better air passage. (Results of this method are sometimes unsatisfactory because of the short duration of effect or rebound congestion.) For longer effect, oral antihistamines with nasal decongestants are often given to provide and maintain a drying effect on secretions.

To clear the tracheobronchial tree, instruct the patient to cough preoperatively. Cold steam or water nebulizers effectively humidify the nasal, pharyngeal and bronchial passages and often make the patient more comfortable. Tenacious secretions become more watery under humidification, clear more thoroughly preoperatively and are more easily suctioned from the airway during anesthesia.

Give intravenous fluids to those patients who appear dehydrated due to a cold. In a well hydrated patient the respiratory tract secretions are less viscid and more watery. This is particularly true in asthmatics.

Summary: Administration of emergency anesthesia to a patient with a cold or upper respiratory infection can lead to a chain of events that may result in increased postoperative morbidity and even death. This is because of the excess secretions formed in these conditions. Preoperative measures to prevent or reduce these secretions should be undertaken and will result in smoother and safer anesthesia.

references 1. Ellis, G.: Anesthesia and the Common Cold, Anesthesia, 1955, Vol. 10, p. 78. 2. Smith, R. M.: Anesthesia for Infants and Children, 1963, p. 353. 3. Gillespie, Noel A.: Endotracheal Anesthesia, 1963, p. 155 et seq. 4. Smith, R. M.: Anesthesia for Infants and Children, 1963, p. 353. 5. Written, F. W.: Postoperative Laryngeal Stridor, British Journal of Anesthesia, 1966, Vol. 38, p. 73. 6. Snyder & Gants: Respiratory Obstruction at the Glottic Level, Anesthesiology, 1953, Vol. 14, p. 195. 7. Doming, M. V. & Oech, S. R.: Steroid and Antihistaminic Therapy for Postintubation Subglottic Edema in Infants and Children, Anesthesiology, 1961, Vol. 22, p. 933. 8. Gillespie, Noel A.: Endotracheal Anesthesia, 1963, p. 118.

An expectorant that makes coughs count by increasing respiratory tract fluid nearly 200%—plus an oral decongestant to relieve a probable cause of cough, postnasal drip. Your patients receive these benefits when you prescribe...

Triaminic® *Expectorant*

Each teaspoonful (5 ml.) contains:

Phenylpropanolamine hydrochloride	12.5 mg.
Pheniramine maleate	6.25 mg.
Pyrilamine maleate	6.25 mg.
Glyceryl guaiacolate	100 mg.
Alcohol	5%

Dosage: Adults—2 teaspoonfuls; Children 6 to 12 years—1 tsp.; Children 1 to 6 years—½ tsp. Administer every four hours. Side effects: Occasional drowsiness, blurred vision, cardiac palpitations, flushing, dizziness, nervousness, or gastrointestinal upsets. Precautions: The patient should be advised not to drive a car or operate dangerous machinery if drowsiness occurs. Use with caution in patients with hypertension, heart disease, diabetes or thyrotoxicosis.

(Advertisement)

DELEGATES AND ALTERNATES/Continued

Frederick S. Gillett, M.D., 50 College Ave., SE, Grand Rapids 49503
Harvey M. Andre, M.D., 500 Cherry St., SE, Grand Rapids 49503
Richard A. Rassmussen, M.D., 1810 Wealthy St., SE, Grand Rapids 49506
Jack Hoogerhyde, M.D., 26 Sheldon Ave., SE, Grand Rapids 49502
Victor A. Notier, M.D., 50 College Ave., SE, Grand Rapids 49503
Kornelius Van Goor, M.D., 26 Sheldon Ave., SE, Grand Rapids 49502
Jack G. Lukens, M.D., 245 State St., SE, Grand Rapids 49502
John C. Montgomery, M.D., 1810 Wealthy St., SE, Grand Rapids 49506
Warren C. Pilling, M.D., 833 Lake Drive, SE, Grand Rapids 49506
Reinard P. Nanzig, M.D., 153 Lafayette Ave., SE, Grand Rapids 49503
David J. Horning, M.D., 26 Sheldon Ave., SE, Grand Rapids 49502
William E. Kincaid, M.D., 100 Michigan St., NE, Grand Rapids 49503
William G. O'Driscoll, M.D., 515 Lakeside Dr., SE, Grand Rapids 49506
Robert J. Raiman, M.D., 50 College Ave., SE, Grand Rapids 49503
Jack H. Townsend, M.D., 515 Lakeside Dr., SE, Grand Rapids 49506

LAPEER
James R. Doty, M.D., 315 Clay Street, Lapeer
Cornell Greavu, M.D., North Branch

LENAWEE
Donato F. Sarapo, M.D., Mill Street, Adrian
Marvin B. Wolf, M.D., 689 Stockford Dr., Adrian

LIVINGSTON
Edwin S. Woodworth, M.D., 1200 Byron Road, Howell
Robert T. Polack, M.D., 1223 Thurber Drive, Howell

LUCE
B. Greg Keizer, M.D., Newberry State Hospital, Newberry
Lawrence E. Grennan, M.D., 210 W. John, Newberry

MACOMB
Peter V. Kane, M.D., 713 Monitor Leader Bldg., Mt. Clemens
Sydney Scher, M.D., 132 Cass, Mt. Clemens
Edward G. Siegfried, M.D., 229 S. Gratiot, Mt. Clemens
Bernard J. Goldman, M.D., 243 S. Gratiot, Mt. Clemens
Daniel L. Rousseau, M.D., Lobby Suite Monitor Leader Bldg., Mt. Clemens

MANISTEE
Marlo L. Schwarz, M.D., Onekama, Michigan
Donald N. Schwing, M.D., Cypress and Ninth, Manistee, Michigan 49660

MARQUETTE-ALGER
George M. Wilson, Jr., M.D., 1414 W. Fair Ave., Marquette
Fred C. Sabin, M.D., 1414 W. Fair Ave., Marquette

MASON
William F. Sutter, M.D., 220 S. James St., Ludington
Robert L. Ewing, M.D., Tinmham Ave., Ludington

MECOSTA-OSCEOLA-LAKE
James L. Tyson, M.D., 1014 S. State, Big Rapids
Leland A. Hickox, M.D., 1014 S. State, Big Rapids

MENOMINEE
Herman R. Brukardt, M.D., Menominee,
William S. Jones, Jr., M.D., Menominee

MIDLAND
V. A. Marks, M.D., 2706 Louanna, Midland
Harold L. Gordon, M.D., Medical Dept., Dow Chemical Co., Midland

MONROE
S. Newton Kelso, Jr., M.D., 116 Cole Road, Monroe
Bernard Sisman, M.D., 130 Cole Road, Monroe

MUSKEGON
H. Clay Tellman, M.D., 315 West Clay St., Muskegon
Leland E. Holly, II, M.D., 889 Second Street, Muskegon
Robert J. Fles, M.D., 1715 Peck Street, Muskegon
John D. Folsom, M.D., 1706 Peck Street, Muskegon
Everett H. Johnston, M.D., 889 Second Street, Muskegon
Clarence A. Vandervelde, M.D., 1470 Peck Street, Muskegon

NEWAYGO
J. Paul Klein, M.D., 16 W. Sheridan, Fremont
Hugh R. Moore, M.D., 38 State Road, Newaygo

NORTH CENTRAL
Louis F. Hayes, M.D., Gaylord, Michigan
Charles L. Oppy, M.D., Roscommon

NORTHERN MICHIGAN
Thomas R. Kirk, M.D., Burns Clinic, Petoskey
Joanne E. Mertz, M.D., Burns Clinic, Petoskey

OAKLAND
Arnold L. Brown, M.D., 35 S. Johnson St., Pontiac 48053
Carl H. Birkele, M.D., 4680 Dixie Highway, Drayton Plains
Edward E. Elder, Jr., M.D., 1116 Voorheis, Pontiac 48054
Richard R. Galpin, M.D., 525 Southfield Rd., Birmingham
F. Michael Sheridan, M.D., 1307 S. Washington, Royal Oak 48013
Paul T. Lahti, M.D., 3600 W. 13 Mile Road, Royal Oak 48072
Harold A. Furlong, M.D., 35 S. Johnson, Pontiac 48053
James R. Quinn, M.D., 880 Woodward, Pontiac 48053
John H. McLaughlin, M.D., 604 N. Woodward, Birmingham 48011
Shelby M. Baylis, M.D., 35 S. Johnson, Pontiac 48053
Raymond A. Gagliardi, M.D., 880 Woodward, Pontiac 48053
Bruce A. Kresge, M.D., 1500 Walton Blvd., Rochester 48063
James E. Henderson, M.D., 880 Woodward, Pontiac 48053
Harry Arnkoff, M.D., 140 Illinois, Pontiac 48053
James A. Read, M.D., 610 N. Woodward, Birmingham 48011
John Lee Barrett, M.D., 800 S. Adams Road, Birmingham 48011
Charles R. Sempere, M.D., 35 S. Johnson, Pontiac 48053
Bruce D. Bauer, M.D., 22643 Stephenson Highway, Hazel Park
Donald G. Albert, M.D., 1665 W. 12 Mile Road, Berkley 48072
John R. Lichtwardt, M.D., 247 N. Hunter Blvd., Birmingham 49013

OCEANA
John J. Vrbanac, M.D., 22 N. State Street, Hart
Willis A. Hasty, M.D., Shelby

ONTONAGON
James P. Strong, M.D., 701 River St., Ontonagon
Donald H. Archibald, M.D., 101 Second Street, Ontonagon

OTTAWA
William Rottschaefer, M.D., Holland Medical Center, Holland
Peter J. De Vries, M.D., 214 Washington Street, Grand Haven

SAGINAW
Vernon V. Bass, M.D., 3322 Davenport, Saginaw
Robert J. Toteff, M.D., 2110 Morson, Saginaw
Duane B. Heilbronn, M.D., 1703 N. Michigan, Saginaw
Roy J. Gerard, M.D., 2419 Mackinaw, Saginaw
Vital E. Cortopassi, M.D., 324 S. Washington, Saginaw
Edward F. Kickham, M.D., 705 Adams, Saginaw

ST. CLAIR
James H. Tisdel, M.D., 310 E. Water Street, Port Huron
Anthony G. Gholz, M.D., 1209 Tenth Street, Port Huron
John M. Miller, M.D., 1010 Griswold Street, Port Huron
Claude A. Ludwig, M.D., 916 7th Street, Port Huron

ST. JOSEPH
Stanley C. Penzotti, M.D., 117 Spring St., Three Rivers
S. Albert Fiegel, M.D., 111 S. Monroe, Sturgis

SANILAC
Keate T. McGunegle, M.D., Sandusky
Raymond J. Winfield, M.D., Marlette

SHIAWASSEE
Claude L. Weston, M.D., Matthews Bldg., Owosso
Henry T. Forsyth, M.D., Chesaning

ALTERNATES AND DELEGATES/Continued

TUSCOLA

Edward J. Miles, M.D., Caro
Maurice H. Chapin, M.D., Millington

VAN BUREN

Edwin H. Terwilliger, M.D., P.O. Box 110, South Haven
David J. Millard, M.D., Paw Paw

WASHTENAW

Gerhard H. Bauer, M.D., 2015 Manchester Road, Ann Arbor
Harold F. Falls, M.D., University Medical Center, Ann Arbor
John E. Magielski, M.D., St. Joseph Mercy Hospital, Ann Arbor
Beverly C. Payne, M.D., 425 E. Washington St., Ann Arbor
Clarence E. Crook, M.D., St. Joseph Mercy Hospital, Ann Arbor
L. Dell Henry, M.D., 706 W. Huron, Ann Arbor
Henry A. Scovill, M.D., 107 Washtenaw, Ypsilanti
Harry A. Towsley, M.D., University Medical Center, Ann Arbor
Stuart M. Gould, M.D., Box 65, Mercywood Hospital, Ann Arbor
John W. Henderson, M.D., University Medical Center, Ann Arbor
George S. Sayre, M.D., 27 S. Prospect, Ypsilanti
William R. Rekshan, M.D., 2015 Manchester Road, Ann Arbor
Dean P. Carron, M.D., 425 E. Washington, Ann Arbor
Joseph V. Fisher, M.D., 116 Park St., Chelsea
Howard R. Williams, M.D., 1950 Manchester Road, Ann Arbor
Earl F. Wolfman, Jr., M.D., University Medical Center, Ann Arbor

WAYNE

Brock E. Brush, M.D., Henry Ford Hosp., Detroit 48202
Frank B. Bicknell, M.D., 938 David Whitney Bldg., Detroit 48226
James C. Danforth, Jr., M.D., 20175 Mack, Detroit 48236
James B. Blodgett, M.D., 606 Kales Bldg., Detroit 48226
James J. Lightbody, M.D., 501 David Whitney Bldg., Detroit 48226
Donald N. Sweeny, Jr., M.D., 8445 E. Jefferson, Detroit 48214
Sidney Adler, M.D., 755 Fisher Bldg., Detroit 48202
Francis P. Rhoades, M.D., 2414 David Broderick Tower, Detroit 48226
David I. Sugar, M.D., 17 Brady, Detroit 48201*
Wyman C. C. Cole, Jr., M.D., 1063 Fisher Bldg., Detroit 48202
James D. Fryfogle, M.D., Med. Concourse, Northland Center, Southfield
Joseph J. Montante, M.D., 18715 Bretton Dr., Detroit 48223
Marjorie Peebles Meyers, M.D., 5320 John R., Detroit 48202
Louis E. Heideman, M.D., 20211 Greenfield, Detroit 48235
C. Jackson France, M.D., 17712 Mack, Detroit 48224
Alexander Blain, III, M.D., 2201 E. Jefferson, Detroit 48207
William L. Brosius, M.D., 1554 Tuxedo, Detroit 48206
Charles E. Darling, M.D., 673 Fisher Bldg., Detroit 48202
A. Jackson Day, M.D., 220 Eastland Professional Bldg., Detroit 48236
Paul J. Connolly, M.D., 18255 W. McNichols Rd., Detroit 48219
Raymond J. Barrett, M.D., 307 David Whitney Bldg., Detroit 48226
Homer M. Smathers, M.D., 17620 W. McNichols, Detroit 35
G. Thomas McKean, M.D., 1515 David Whitney Bldg., Detroit 48226
George T. Bradley, M.D., 1201 David Whitney Bldg., Detroit 48226
Russell F. Fenton, M.D., 15125 Grand River, Detroit 48227
William J. Yott, M.D., 17420 E. Warren, Detroit 48224
George L. Reno, M.D., 970 Fisher Bldg., Detroit 48202
Alfred H. Whittaker, M.D., 17000 E. Jefferson, Detroit 48230
John G. Slevin, M.D., 1304 Broderick Tower, Detroit 48226
Raphael Altman, M.D., 17000 W. Eight Mile Rd., Southfield
Louis Carbone, M.D., 14711 Gratiot, Detroit 48205
Sherwin J. Lutz, M.D., 15121 W. McNichols, Detroit 35
Rosser L. Mainwaring, M.D., 18101 Oakwood Blvd., Dearborn
Max L. Lichter, M.D., 2900 Oakwood Blvd., Melvindale 48122
James M. Kennary, M.D., 4900 Cadieux Rd., Detroit 24
John E. Hauser, M.D., 20905 Greenfield, Southfield
Robert H. Hamburg, M.D., 1515 David Whitney Bldg., Detroit 48226
Sidney E. Chapin, M.D., 125 N. Military, Dearborn 7
Joseph A. Witter, M.D., 344 Glendale, Detroit 48203
Seymour S. Adelson, M.D., 18400 Shaefer, Detroit 48235
Homer A. Howes, M.D., 1515 David Whitney Bldg., Detroit 48226
Z. Stephen Bohn, M.D., 10 Peterboro, Detroit 48201
Ralph H. Pino, M.D., 48151 W. Ann Arbor Rd., Plymouth
Irvin A. Wilner, M.D., 17701 W. McNichols, Detroit 48235
Don A. Young, M.D., 14807 W. McNichols Rd., Detroit
Mario A. Petrini, M.D., 1080 Fisher Bldg., Detroit 48202
Eli J. Igna, M.D., Henry Ford Hospital, Detroit 48202
Clarke M. McColl, M.D., Henry Ford Hospital, Detroit 48202
Harold B. Fenech, M.D., 205 Professional Bldg., Detroit 48201
Benjamin Jeffries, M.D., 19959 Vernier Rd., Harper Woods
John W. Moses, M.D., 754 Fisher Bldg., Detroit 2
Raymond A. Sokolov, M.D., 3011 W. Grand Blvd., Detroit 2
Joseph N. Schaeffer, M.D., 261 Brady, Detroit 1
Fred W. Whitehouse, M.D., 2799 W. Grand Blvd., Detroit 2
George Mogill, M.D., 3150 Second Blvd., Detroit 1
Arthur B. Levant, M.D., 15715 E. Warren, Detroit 24
Harry Y. Kasabach, M.D., 952 David Whitney Bldg., Detroit 48226
James E. Coyle, M.D., 573 Fisher Bldg., Detroit 2
H. Ross Hume, M.D., 1553 Woodward, Detroit 26
Ernest L. Stefani, M.D., 18455 Jas. Couzens Hwy., Detroit 35
John W. Sigler, M.D., Henry Ford Hospital, Detroit
Reuben I. Shapiro, M.D., 22341 W. 8 Mile Rd., Detroit
J. William Derr, M.D., 1145 David Whitney Bldg., Detroit 26
Laurel S. Eno, M.D., 212 Eastland Pr. Bldg., Detroit 36
Henry M. Domzalski, M.D., 15252 Gratiot Ave., Detroit 5
Earl E. Weston, M.D., 18101 Jas. Couzens Hwy., Detroit 35
David W. Lindner, M.D., 801 David Whitney Bldg., Detroit 26
Carl A. Gagliardi, M.D., 3516 Fort St., Lincoln Park
Saul Sakwa, M.D., 17000 W. Eight Mile, Southfield
Elden C. Baumgarten, M.D., 1062 Lockmoor Blvd., Grosse Pointe Woods
Robert C. Thumann, M.D., 20045 Mack Ave., Grosse Pointe Woods
Carl J. Sprunk, M.D., 2900 Oakwood Blvd., Melvindale
Paul H. Dumke, M.D., 2799 W. Grand Blvd., Detroit 2
Robert A. Gerisch, M.D., 1217 David Whitney Bldg., Detroit 26
Charles J. Holt, Jr., M.D., 1210 S. Oxford, Grosse Pte. 30
Lee E. Feldkamp, M.D., 360 N. Main, Plymouth
Fred E. Caumartin, M.D., 17184 Wildemere, Detroit 21
Walter L. Anderson, M.D., 1553 Woodward Ave., Detroit 26
Walter W. Hassig, M.D., 20914 Kelly, East Detroit
Frank B. Walker, M.D., 1305 Berkshire Rd., Grosse Pte.
Fredrick Weissman, M.D., 20905 Greenfield Rd., Southfield
Walter F. Kujawski, M.D., 16840 E. Warren, Detroit 24
Charles P. Anderson, M.D., 16733 Plainview Rd., Detroit
Everal M. Wakeman, M.D., 23100 Cherry Hill, Dearborn
Richard S. Kamil, M.D., 14438 McNichols, Detroit 35
Arthur A. Ulmer, M.D., 79 Greenbriar, Grosse Pointe Shores
Thomas Ganos, M.D., 6742 Park Ave., Allen Park
Arthur M. Clark, M.D., 401 River Lane, Dearborn
E. Clarkson Long, M.D., 19751 James Couzens Hwy., Detroit 35
Robert P. Lytle, M.D., 402 Northland Med. Bldg., Southfield
Alfred Golden, M.D., 26764 York Rd., Huntington Woods
James R. Lloyd, M.D., 1515 David Whitney Bldg., Detroit
Gerald H. Mandell, M.D., Sinai Hospital, Detroit 35
Andrew R. W. Climie, M.D., Harper Hospital, Detroit
Raymond J. Kokowicz, M.D., 19440 Van Dyke, Detroit 34

SQUIBB NOTES ON THERAPY

Behind continued high blood pressure readings lies the possibility of organic damage[1-13]

MANY OF THE aspects of essential hypertension are unpredictable—either because there are a number of mechanisms involved or because individuals differ in their responses to these mechanisms.[1]

There is one aspect of hypertension, however, that seems, in many cases, predictable. ". . . when the blood pressure is elevated to a marked degree for an adequate period of time, this in itself leads to perpetuation of the syndrome with resulting vascular damage throughout the body."[14] All too often the disease progresses until there is damage to one of three vital organs: the heart, the kidney, the brain.

> "Hypertension is certainly a major factor in the genesis of coronary heart disease, and it is even more important when compounded with obesity."[4]
>
> "[Vascular deterioration] can be clearly seen in the kidney with a degree of damage that can be measured by renal function studies."[10]

". . . most evidence suggests that reduction of blood pressure, when it is too high, not only relieves the heart of excess work but reduces vascular damage."[1]

"In short, treatment is indicated."[1]

Antihypertensive therapy will not restore the blood vessels to normal. Yet many of the vascular changes and symptoms caused by increased blood pressure may be arrested or alleviated when the blood pressure is reduced to normotensive levels.[7]

Reducing the blood pressure helps curtail further vascular damage and improves the prognosis — when damage is not too far advanced before therapy is started.[14] Essential hypertension is an indication not only for treatment, but for *early* and adequate treatment of the patient in question.

Reduce the blood pressure with Rautrax-N

Rautrax-N combines the antihypertensive-tranquilizing action of whole root rauwolfia with the antihypertensive-diuretic action of bendroflumethiazide in one convenient medication. The two drugs complement each other so that smaller doses of both are possible.

Rauwolfia combined with bendroflumethiazide is particularly effective in long-term therapy,[15-17] since beneficial effects do not diminish with continuous daily administration.

For most patients 1 or 2 Rautrax-N tablets daily are sufficient for maintenance therapy. The simplicity, convenience and economy of such a dosage schedule are of particular benefit to older patients.

References: 1. Page, I. H., and Dustan, H. P.: The Usefulness of Drugs in the Treatment of Hypertension, in Ingelfinger, F. J.; Relman, A. S., and Finland, M.: Controversy in Internal Medicine, Philadelphia, W. B. Saunders Co., 1966, p. 95. **2.** Hollander, W.: The Evaluation of Antihypertensive Therapy of Essential Hypertension in Ingelfinger, F. J.; Relman, A. S., and Finland, M.: Controversy in Internal Medicine, Philadelphia, W. B. Saunders Co., 1966, p. 97. **3.** Nickerson, M.: Antihypertensive Agents and the Drug Therapy of Hypertension, in Goodman, L. S., and Gilman, A.: The Pharmacological Basis of Therapeutics, ed. 3, New York, The Macmillan Co., 1965, p. 727. **4.** Berkson, D. M.: Indust. Med. & Surg. **32**:371, 1963. **5.** Cohen, B. M.: M. Times **91**:645, 1963. **6.** Lee, R. E., et al.: Am. J. Cardiol. **11**:738, 1963. **7.** Moyer, J. H.: Am. J. Cardiol. **9**:821, 1962. **8.** Moser, M.: New York J. Med. **62**:1177, 1962. **9.** Wood, J. E., and Battey, L. L.: Am. J. Cardiol. **9**:675, 1962. **10.** Moyer, J. H., and Heider, C.: Am. J. Cardiol. **9**:920, 1962. **11.** Moser, M., and Macaulay, A. I.: New York State J. Med. **60**:2679, 1960. **12.** Judson, W. E.: Nebraska M. J. 44:305, 1959. **13.** Hodge, J. V.; McQueen, E. G., and Smirk, H.: Brit. M. J. 1:5218, 1961. **14.** Moyer, J. H., and Brest, A. N.: Hypertension Recent Advances, Philadelphia, Lea & Febiger, 1961, p. 633. **15.** Berry, R. L., and Bray, H. P.: J. Am. Geriatrics Soc. **10**:516, 1962. **16.** Reid, W. J.: J. Am. Geriatrics Soc. **13**:365, 1965. **17.** Feldman, L. H.: North Carolina M. J. **23**:248, 1962.

Contraindications: Severe renal impairment or previous hypersensitivity. **Warning:** Ulcerative small bowel lesions have occurred with potassium-containing thiazide preparations or with enteric-coated potassium salts supplementally. Stop medication if abdominal pain, distension, nausea, vomiting or G.I. bleeding occur.

Precautions and Side Effects: The dose of ganglionic blocking agents, veratrum or hydralazine when used concomitantly must be reduced by at least 50% to avoid orthostatic hypotension. Caution is indicated in patients with depression, suicidal tendencies, peptic ulcer; electrolyte disturbances are possible in cirrhotic or digitalized patients. Marked hypotension during surgery is possible; consider discontinuing two weeks prior to elective surgery and observe patients closely during emergency surgery. Rauwolfia preparations may cause reversible extrapyramidal symptoms and emotional depression, diarrhea, weight gain, edema, drowsiness may occur. Bendroflumethiazide may cause increases in serum uric acid, unmask diabetes, increase glycemia and glycosuria in diabetic patients, and may cause hypochloremic alkalosis, hypokalemia; cramps, pruritus, paresthesias, rashes may occur.

Dosage and Supply: Initial dosage, 1 to 4 tablets daily, preferably at mealtime. Maintenance, 1 or 2 tablets daily. Rautrax-N is supplied as capsule-shaped tablets containing 50 mg. Rauwolfia serpentina whole root (Raudixin®), 4 mg. bendroflumethiazide (Naturetin®), 400 mg. potassium chloride.

Also available: Rautrax-N Modified — capsule-shaped tablets containing 50 mg. Rauwolfia serpentina whole root (Raudixin), 2 mg. bendroflumethiazide (Naturetin), 400 mg. potassium chloride. Both potencies available in bottles of 100. For full information, see Product Brief.

RAUTRAX®-N

Squibb Rauwolfia Serpentina Whole Root (50 mg.) with Bendroflumethiazide (4 mg.) and Potassium Chloride (400 mg.)

SQUIBB

'The Priceless Ingredient' of every product is the honor and integrity of its maker.

ALTERNATES AND DELEGATES/Continued

Clayton M. Shores, M.D., 19635 Mack Ave., Detroit 35
Vincent J. Gallant, M.D., 16766 Ashton, Detroit 19
Paul M. Zavell, M.D., 1932 Broadstone, Grosse Pte. Woods
Alexander H. Hirschfeld, M.D., 829 Fisher Bldg., Detroit 2
Edward D. Maire, M.D., 15224 E. Jefferson, Detroit 30
Victor E. Nelson, M.D., 3025 Crooks Rd., Royal Oak
John W. Moynihan, M.D., 2841 Monroe Blvd., Dearborn
Lee B. Stevenson, M.D., Henry Ford Hospital, Detroit
Frank W. Prust, M.D., 1536 David Whitney Bldg., Detroit 26
Edward G. Forgrave, M.D., 18520 Grand River, Detroit 23
Donald I. Bryan, M.D., 13700 Woodward Ave., Highland Park 3
Horace F. Bradfield, M.D., 3008 E. Grand Blvd., Detroit
John M. Shuey, M.D., 17198 Oak Dr., Detroit 21
John J. Smolenski, M.D., 13815 Puritan Ave., Detroit 27
Jean M. Holdredge, M.D., 3011 W. Grand Blvd., Detroit 2
Louis R. Zako, M.D., 9845 Reeck Rd., Allen Park
John J. Siller, M.D., 17000 W. 8 Mile Rd., Southfield

WEXFORD-MISSAUKEE

Dennis E. Van Alst, M.D., Medical Arts Group, Cadillac
Lawrence O. Garber, M.D., 222 Howard Street, Cadillac

---

*deceased

SECTION DELEGATES

Chapter 9, Section 2, MSMS Bylaws: "The officers of this Society, the members of The Council and one delegate from each authorized section shall be ex-officio members of the House of Delegates, but with the exception of the Speaker and Vice Speaker of the House of Delegates, shall be without power to vote therein. The immediate Past President shall be a member at large of the House of Delegates during the first year of past-presidency with right to vote and hold office. All other Past Presidents shall have the privilege of the floor, without the right to vote."

ALLERGY AND APPLIED IMMUNOLOGY

James A. McLean, M.D., 1313 E. Ann Street, Ann Arbor
(Alternate not elected)

ANESTHESIOLOGY

Ralph S. Askam, M.D., Medical Arts Center, Muskegon
John D. Snider, M.D., 1827 Argentina Dr., SE, Grand Rapids

DERMATOLOGY

Robert J. Schoenfeld, M.D., 794 N. Woodward Ave., Birmingham
(Alternate not elected)

GASTROENTEROLOGY

Joseph A. Rinaldo, Jr., M.D., Henry Ford Hospital, Detroit
(Alternate not elected)

GENERAL PRACTICE

Douglas A. Haddock, M.D., 6646 Portage St., Kalamazoo
(Alternate not elected)

GYNECOLOGY AND OBSTETRICS

Philip S. Peven, M.D., 18709 Mayers Road, Detroit 35
(Alternate not elected)

INTERNAL MEDICINE

Carl B. Beeman, M.D., 515 Lakeside Dr., SE, Grand Rapids
(Alternate not elected)

NEUROLOGICAL SURGERY

Austin E. Lamberts, M.D., 68 Ransom Ave., NE, Grand Rapids
(Alternate not elected)

OCCUPATIONAL MEDICINE

Martin F. Bruton, M.D., 341 Massachusetts, Detroit 31
(Alternate not elected)

OPTHALMOLOGY AND OTOLARYNGOLOGY

James L. Frey, M.D., (Opth), 1553 Woodward Ave., Detroit 26
G. Don Albers, M.D. (Oto) 203 Paris Ave., SE, Grand Rapids
(Alternates not elected)

ORTHOPEDIC SURGERY

Hira E. Branch, M.D., 821 Mott Fdn. Bldg., Flint 4850
(Alternate not elected)

PATHOLOGY

Robert C. Horn, Jr., M.D., 2799 W. Grand Blvd., Detroi
(Alternate not elected)

PEDIATRICS

Robert J. McGillicuddy, M.D., 300 W. Ottawa, Lansing
(Alternate not elected)

PLASTIC SURGERY

Ralph Blocksma, M.D., 245 State St., SE, Grand Rapids
(Alternate not elected)

PROCTOLOGY

Donald J. Pearson, M.D., 255 North Ave., Battle Creek
(Alternate not elected)

PSYCHIATRY AND NEUROLOGY

(Not elected)
(Alternate not elected)

PUBLIC HEALTH AND PREVENTIVE MEDICINE

Oscar D. Stryker, M.D., 43525 Elizabeth Rd., Mt. Clemen
G. Fred Moench, M.D., 147 Center St., Sanford

RADIOLOGY

Benjamin R. Van Zwalenburg, M.D., 2116 Coronado Dr SE, Grand Rapids
(Alternate not elected)

SURGERY

John W. Derr, M.D., 1145 David Whitney Bldg., Detroit
(Alternate not elected)

UROLOGY

Murray S. Mahlin, M.D., 16820 Greenfield Ave., Detroit
(Alternate not elected)

KINGSWOOD HOSPITAL, Michigan's finest
and newest facility for intensive, short-term
treatment of voluntary
neuropsychiatric patients.

Philip N. Brown, M.D.
Medical Director

Marvin J. Lawrence, F.A.C.H.A.
Administrator

KINGSWOOD HOSPITAL
10300 W. EIGHT MILE ROAD
FERNDALE 20, MICHIGAN Telephone: Area 313 398-3200

Doctor,

Here is the Abbott anorectic program designed to meet the individual needs of your overweight patients.

ABBOTT

mood elevation

DESOXYN® Gradumet® (methamphetamine hydrochloride)

Smooth appetite control plus mood elevation.

The obese patient on a diet often has to battle depression as well as overweight. Desoxyn Gradumet helps the dieter in both battles by elevating the mood while it curbs the appetite. Thanks to the Gradumet, medication is smoothly released all-day from a single oral dose.

If she can't take plain amphetamine, put her on DESBUTAL® Gradumet

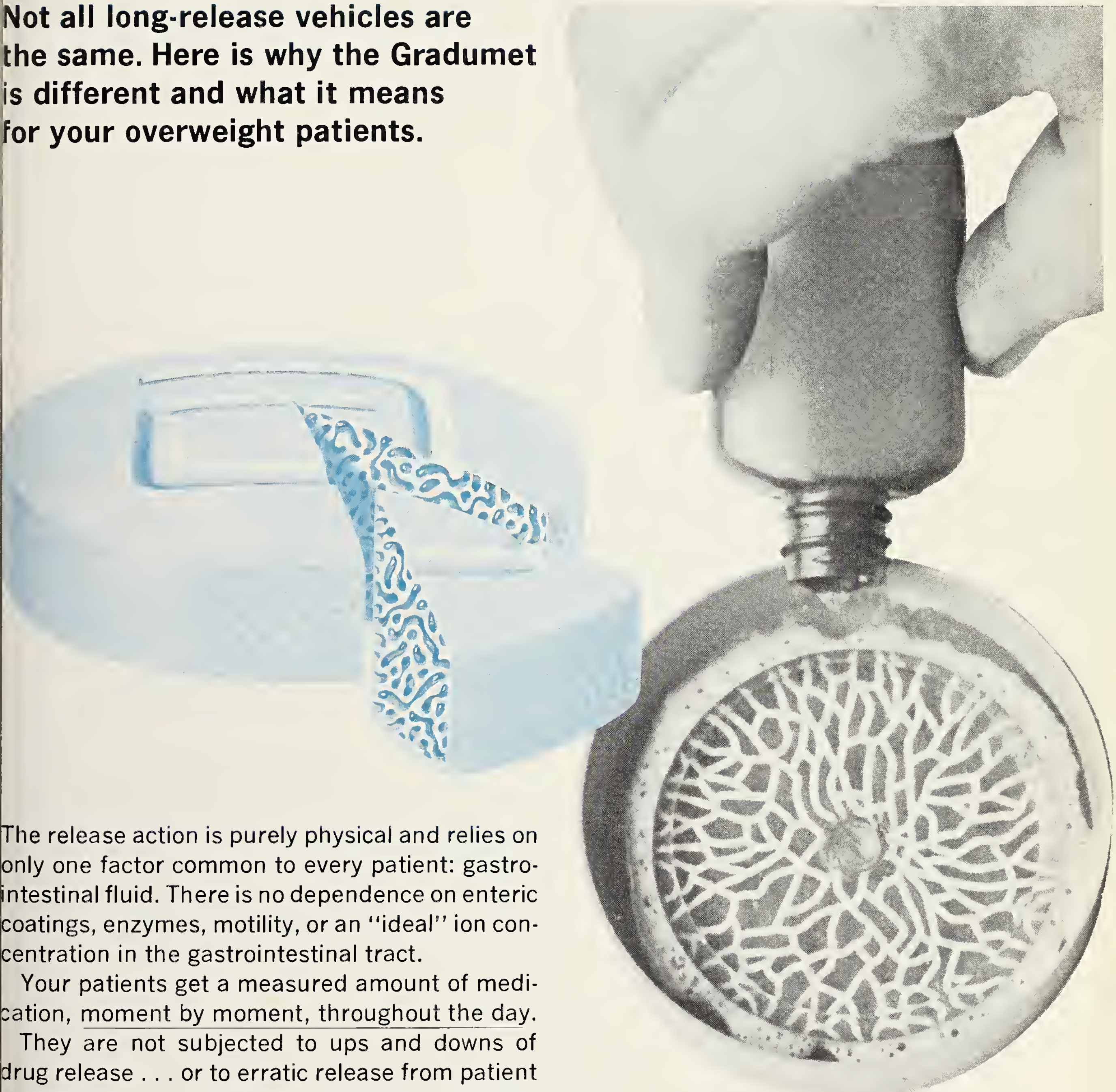
Calms anxieties; controls compulsive eating.

Desbutal Gradumet provides 2 drugs in 2 tablet sections, combined back to back to form a single tablet. One section contains Desoxyn to curb the appetite and lift the mood; the other contains Nembutal® (pentobarbital) to calm the patient and counteract any excessive stimulation.

Both drugs are released in an effective dosage ratio throughout the day.

controlled release

Not all long-release vehicles are the same. Here is why the Gradumet is different and what it means for your overweight patients.



The release action is purely physical and relies on only one factor common to every patient: gastrointestinal fluid. There is no dependence on enteric coatings, enzymes, motility, or an "ideal" ion concentration in the gastrointestinal tract.

Your patients get a measured amount of medication, moment by moment, throughout the day.

They are not subjected to ups and downs of drug release . . . or to erratic release from patient to patient . . . or to erratic release in the same patient from day to day.

That's why the Gradumet provides controlled-release as well as long release.

Perhaps you saw the Gradumet model demonstration which shows that the release is entirely physical. When fluid is added, the drug in the outer ends of the channels dissolves. As fluid penetrates deeper into the channels, there is a continuous release of medication. The rate of release is rigidly controlled by the size and number of channels.

choice of 5 strengths

Abbott
Anorectic
Program

DESOXYN Gradumet

Methamphetamine Hydrochloride in Long-Release Dose Form

5 mg. 10 mg. 15 mg.

DESBUTAL 10 Gradumet

10 mg. Methamphetamine Hydrochloride,
60 mg. Pentobarbital Sodium

Front Side

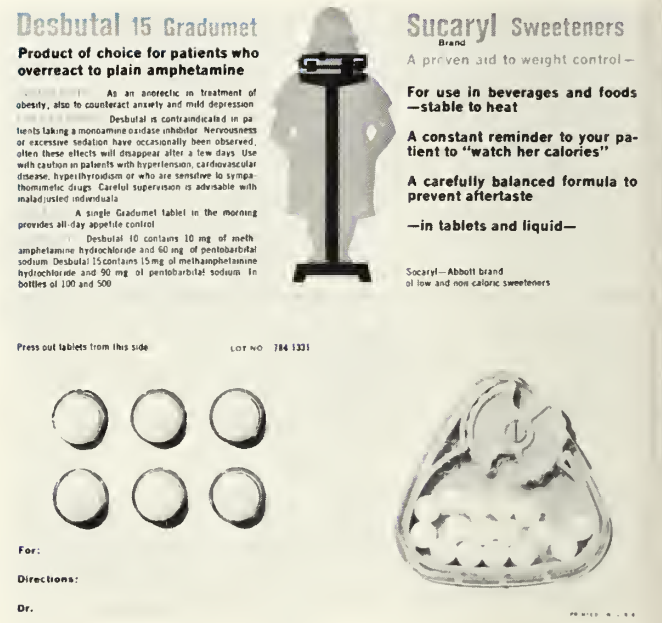
DESBUTAL 15 Gradumet

15 mg. Methamphetamine Hydrochloride,
90 mg. Pentobarbital Sodium

Front Side

samples available

Each sample contains 6 tablets and a filled Sucaryl® Sweetener dispenser. For a supply, write Abbott Laboratories or ask your Abbott man.



Desbutal 15 Gradumet

Product of choice for patients who overreact to plain amphetamine

As an anorectic in treatment of obesity, also to counteract anxiety and mild depression

Desbutal is contraindicated in patients taking a monoamine oxidase inhibitor. Nervousness or excessive sedation have occasionally been observed, often these effects will disappear after a few days. Use with caution in patients with hypertension, cardiovascular disease, hyperthyroidism or who are sensitive to sympathomimetic drugs. Careful supervision is advisable with maladjusted individuals

A single Gradumet tablet in the morning provides all-day appetite control

Desbutal 10 contains 10 mg. of methamphetamine hydrochloride and 60 mg. of pentobarbital sodium. Desbutal 15 contains 15 mg. of methamphetamine hydrochloride and 90 mg. of pentobarbital sodium. In bottles of 100 and 500

Sucaryl Sweeteners
Brand

A proven aid to weight control—

For use in beverages and foods —stable to heat

A constant reminder to your patient to "watch her calories"

A carefully balanced formula to prevent aftertaste

—in tablets and liquid—

Sucaryl—Abbott brand of low and non caloric sweeteners

Press out tablets from this side LOT NO 784 1331

For:

Directions:

Dr.

economy

Patients, in many cases, save enough to get five weeks of medication for the price of four, compared to other leading long-release anorectics.

CONTRAINDICATION: Desoxyn and Desbutal are contraindicated in patients taking a monoamine oxidase inhibitor.
PRECAUTIONS: Use with caution in patients with hypertension, cardiovascular disease, hyperthyroidism, old age, or those sensitive to sympathomimetic drugs or ephedrine and its derivatives. Careful supervision is advisable with maladjusted individuals.

ABBOTT

Gradumet—long-release dose form, Abbott: U.S. Pat. No. 2,987,445.
Sucaryl—Abbott brand of low and non-caloric sweeteners.

601060

VHAT THEY SAY BOUT HEALTHMOBILE:

Following are some comments overheard in the SMS Healthmobile by Auxiliary members, who man" the health-museum-on-wheels:

"The people asked for more information on all phases of medical careers."

"One girl, born with a cleft palate, was especially anxious to have her mother come and see the dental display."

"One man wanted to see the heart-lung machine. He knew much more about the heart exhibit than I did as he had had heart surgery."

"A teacher thought all high school science classes would get more out of a visit to the Healthmobile than just reading the textbook."

"Several pre-med students said this was the best display about medical accomplishments they had ever seen."

"The children have shown a great deal of interest and knowledge about health and the body."

"Fifth grader came at suggestion of his science teacher and will write a report for extra credit."

"At noon the junior high students came in flocks, showing each other various items of interest. The transparent woman continues to be the most popular."

"The older visitors seem most talkative and often tell about their illnesses."

"A pharmacist and dentist said that the exhibits were very good and gave much-needed good publicity as to what strides are being made in the medical profession, especially by doctors themselves."

"An interested Boy Scout troop went through today."

MEET OUR OUTSTANDING ANNUAL SESSION EXHIBITORS . . .

MSMS is proud to present an outstanding scien- ic and commercial exhibit at its 101st Annual ssion in Grand Rapids, September 27-30, at the vic Auditorium.

All physicians are urged to visit the educational splays, to take advantage of the new information available and also to express appreciation for the exhibitors' contribution to the MSMS postgraduate program.

The following commercial exhibitors will present special displays for Physicians:

bbott Laboratories
mericana Corporation
mes Company, Inc.
stra Pharmaceutical
yerst Laboratories
erkeley Medical Instruments
orcherdt Company
he Borden Company
ristol Laboratories
urroughs Wellcome & Co.
arnation Company
iba Pharmaceutical
oca Cola Company
ommercial Equipment Company
. Dewitt Lukens Co.
ictaphone Corporation
ome Chemical Inc.
aton Laboratories, Inc.
ncyclopaedia Britannica
ellows-Testagar
erndale Laboratories, Inc.
eigy Pharmaceutical
erber Products Co.
reat Books
ewlett-Packard, Crossley Sales
  Division
oechst Pharmaceuticals
. A. Ingram Company
ey Pharmaceuticals
. Kuhlman & Company
ederle Laboratories
Leonard's Shoes, Inc.
Eli Lilly & Company
J. B. Lippincott Company
P. Lorillard Company
Marion Laboratories, Inc.
Marshall Erdman & Assoc.
McNeil Laboratories
Mead Johnson Laboratories
Medco Products Company
Medical Arts Supply Co.
Medical Protective Co.
Merck Sharp & Dohme
Meyer Laboratories, Inc.
Michigan Bell Telephone Co.
Michigan Medical Service
Mullers Shoes, Inc.
National Bank of Detroit
North American Pharmacal
North States Aviation, Inc.
Ortho Pharmaceutical Corp.
Pacific Medical Equipment Co.
Parke, Davis & Company
Pet Milk Company
Pitman-Moore Division, The
  Dow Chemical Co.
Procter & Gamble Company
Professional Management
Randolph Surgical Supply Co.
R. J. Reynolds Tobacco Co.
A. H. Robins Company, Inc.
Roche Laboratories
Wm. H. Rorer, Inc.
Ross Laboratories
C. J. Rouser Supply Co.
Sandoz Pharmaceuticals
W. B. Saunders Company
Schering Corporation
G. D. Searle & Company
Sherman Laboratories
Siemens Medical of America
Smith Kline & French
  Laboratories
Smith, Miller & Patch
E. R. Squibb & Sons
Stenocord Dictation Systems
Strasenburgh Laboratories
Ben P. Stratton Agency, Inc.
The Stuart Company
Syntex Laboratories, Inc.
S. J. Tutag & Company
Ultra Mark, Inc.
Union Bank & Trust Co.
United States Tobacco Co.
U. S. Vitamin and Pharmaceutical
The Upjohn Company
Wallace Laboratories
Warner-Chilcott Laboratories
Warren-Teed Products Co.
Westwood Pharmaceuticals
White & White Surgical Supply
Winthrop Laboratories
W-T-S Pharmaceuticals
Wyeth Laboratories

MEDISCENE

Sept. 12-16 — Michigan Nurses Association, Conference for Operating Room Nurses, Kellogg Center, East Lansing.

Sept. 25-27 — Michigan State Medical Society House of Delegates, Pantlind Hotel, Grand Rapids

Sept. 27-29 — Michigan State Medical Society Woman's Auxiliary, Pantlind Hotel, Grand Rapids

Sept. 27-30 — Michigan State Medical Society Annual Scientific Session, Civic Center, Grand Rapids

Sept. 28-29 — Michigan State Medical Assistants Society Convention, Mr. President Motel, Grand Rapids

Oct. 11-14 — Annual Convention, Michigan Nurses Association, Jack Tar Hotel and Civic Center, Lansing

Oct. 16-22 — Community Health Week

Oct. 18-19 — Annual Convention, American Cancer Society, Michigan Division, Civic Center, Lansing

Oct. 19-20 — Annual Meeting, Michigan Tuberculosis and Respiratory Disease Association, Kellogg Center, East Lansing

Oct. 20 — Annual Meeting, Michigan Thoracic Society, Kellogg Center, East Lansing

Oct. 24-26 — School Nursing Workshop, Boyne Mountain Lodge, Boyne Falls.

Oct. 27-29 — Annual Convention, Michigan Society for Crippled Children and Adults, Inc., Harris Motor Inn, Kalamazoo

Frank Coleman, M.D., center, Chairman of the AMPAC Board, came from Florida to speak at the MDPAC Workshop. Here he explains the new AMPAC movie about opinion makers to Everette Gustafson, M.D., left, Pontiac, afternoon chairman, and Brock E. Brush, M.D., Detroit, Wayne County Medical Society president.

Time to Suggest Preschool Exams Now

Physicians should urge parents of children, who ar entering kindergarten this fall, to schedule a preschoo physical examination in August to avoid the las minute rush in September.

Michigan physicians have the cards to fill out afte the examination. The card is to be presented whe the child is registered for school this fall.

A certificate is to be attached to the card statin that the child has received immunization against th common childhood diseases. Michigan law (Sectio 376) states that all children entering school for th first time shall submit a statement signed by a physician that they have been immunized against smallpox diphtheria, tuberculosis, tetanus, pertussis and poliomyelitis; a statement signed by one parent or guardian to the effect that the child has not been immunized because of religious convictions or othe objection to immunization; or a request signed by on parent or guardian that the local health departmen give the needed protective injections.

Future Doctor, 12, Begins Study Now!

The enthusiasm of young boys is wonderful to behold.

Their eagerness, optimism, energy—all make u marvel.

Here is such an expression of enthusiasm by a 12 year-old boy interested in being a doctor someday The letter recently was received by MSMS—and answered with encouragement and understanding.

To Whom It May Concern:

I am writing this letter to request much information about the Human Body, which I am very interested in. I would be very grateful if you woul send an abundance of information on the differen systems and organs. I am asking for information o this topic because for my future profession I hope t become a Pediatrician. Included with this information, it would aid me in my study if you would sen pictures and diagrams, etc. . . . I would appreciat this very much since I would like to study early. Sinc I am sure of my future, it would be an advantageou time for me to study since I am only 12. I am a "A" student and I would like to use my intelligenc on a wonderful profession which is beneficial to mankind.

Lilly
H06
Lilly
H06

IDENTI-CODE™

(formula identification code, Lilly)

takes the guesswork out of product identification

A special letter-number symbol will appear on each Lilly capsule or tablet. By checking this code against the *Identi-Code™ Index*, you will be able to identify each unit quickly and accurately:

In cases of overdosage

As a safeguard against error or substitution

When medication was prescribed by another physician

When the prescription label is lost

During telephone conversations with patients

Shipments of products bearing Identi-Code symbols are now leaving Indianapolis. Of course, it will be some time before these drugs reach patients. Before they do, you will have received a complete *Identi-Code Index*.

Representative Lilly Products Bearing Identi-Code

Pulvule®	Enseal® (enteric-release tablet, Lilly)	Capsule-Shaped Tablet	Elliptical Tablet	Round Tablet

ELI LILLY AND COMPANY, INDIANAPOLIS, INDIANA 46206 601133 Lilly

Lilly
H06
Lilly
H06
this
new code
could save
your patient's
life

(see previous page)

The Management of Severe Erythroblastosis In Utero

ORIGINAL SCIENTIFIC ARTICLE

By Robert B. Jaffe, M.D.
Bruce Work, M.D.
Colin Campbell, M.D.
Walter Whitehouse, M.D.

The history of the pathogensis, diagnosis and management of hemolytic disease of the newborn is variegated and extensive.

An early historical highlight was the classic work of Landsteiner[1] related to blood grouping. Following the demonstration by Levine et al[2] of the antigen-antibody nature of erythroblastosis fetalis, there was a series of improvements in both its diagnosis and management. It was found that mothers whose infants might be affected with erythroblastosis could be identified by means of the Coomb's test.[3] There has been some degree of correlation between the indirect Coomb's titer and increasing severity of the disease.

In 1948, Diamond[4] described his technique for exchange transfusion *via* the umbilical cord, a mode of therapy which offers not only treatment of fetal anemia, but also prevention of kernicterus. Since some infants of successive pregnancies may be more severely affected with hemolytic disease, progressively earlier delivery has been employed in an attempt to avoid fetal death *in utero*. There are obvious limitations to such a therapeutic regimen as one must "titrate" the hazards of erythroblastosis against those of prematurity.

Because antibody titers and obstetric history were sometimes misleading, more accurate methods of prediction were sought. Bevis[5] hoped to find some component of the amniotic fluid which would mirror the severity of erythroblastosis fetalis. The work of Liley[6] confirmed that in cases of Rh incompatibility there is a characteristic change in the curve of the absorption of light by amniotic fluid, and that this change is related to the severity of the hemolytic process in the infant.

* * *

OUR USE OF Liley's technique for determining prognosis on the basis of amniotic fluid analysis has been outlined previously.[7] Other studies have also confirmed the value of this method.[8-11] In brief, following placental localization, utilizing a radio-iodinated serum albumin technique,[12] a sample of amniotic fluid is obtained by amniocentesis, ideally beginning by the 28th week of gestation. The specimen of amnotic fluid is protected from light, immediately centrifuged and filtered. Following this, optical densities are measured between 350 and 750 millimicrons (mμ). In an unaffected pregnancy, an essentially straight line is present as noted in Figure 1. In contrast, when the infant is affected by erythroblastosis, a departure from the linearity of this curve will be observed in the 450 mμ vicinity (Figure 2).

The degree of departure from linearity can be correlated with the degree of fetal involvement. When the optical density deviation from linearity at 450 mμ is plotted against the gestational age, predictions can be made concerning fetal status. Three major groups are recognized: a lower-zone group of unaffected or mildly affected babies, a moderately affected or mid-zone group, and a severely affected, upper-zone group.

In the lower-zone group, the prognosis is good and the necessity for exchange transfusion minimal. In the moderately affected group, the prognosis for fetal survival is good when preterm delivery is employed. In this group the necessity for post-delivery exchange transfusion is frequent.

In the upper zone group are the severely affected infants who, regardless of the timing of delivery, have virtually a 100 per cent mortality if no other therapy is employed. It is this group of patients whose infants may benefit from intrauterine fetal transfusion.

* * *

IT HAS LONG BEEN known that the neonate can absorb red blood cells intact from its peritoneal cavity without having the cells undergo hemolysis. Liley[13] found that blood could be given to the fetus *in utero* utilizing the peritoneal approach, and he demonstrated that some babies, who would otherwise have died of erythroblastosis, could be saved by intrauterine transperitoneal transfusions.

If the spectrophotometric data indicate negligible

From the Departments of Obstetrics and Gynecology and Radiology, University of Michigan Medical Center, Ann Arbor, Michigan.

This study was supported in part by Public Health Service Research Grant 5MO1-FR-42-05 from the Division of Research Facilities and Resources.

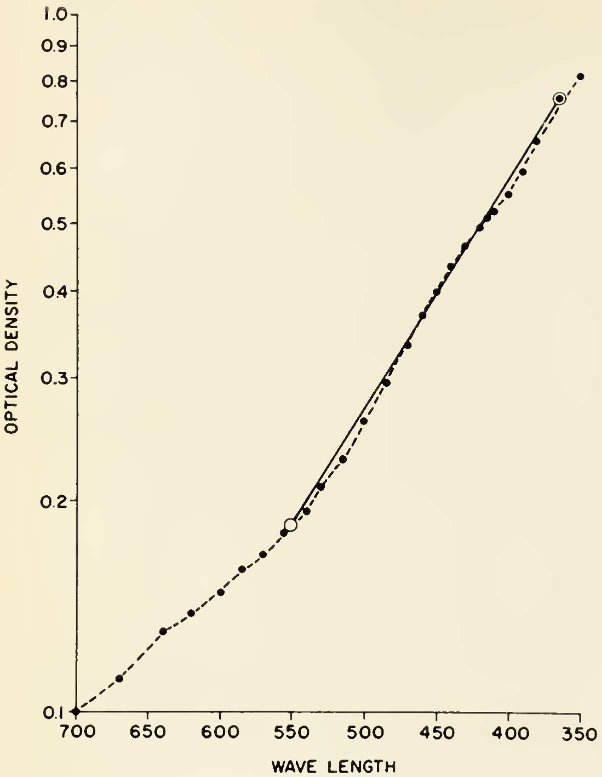


Figure 1. Amniotic fluid spectral absorption pattern in pregnancy uncomplicated by erythroblastosis fetalis.

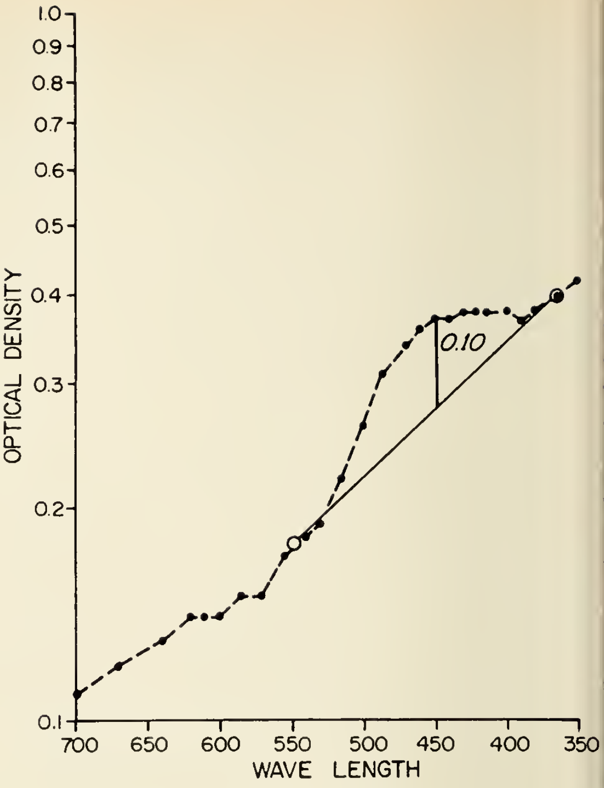


Figure 2. Amniotic fluid spectral absorption pattern in pregnancy marked by intrauterine erythroblastosis fetalis. Note deviation from linearity in 450 mμ region.

chance for fetal survival, and there is a previous history of fetal death *in utero* due to erythroblastosis, intrauterine fetal transfusion is performed.

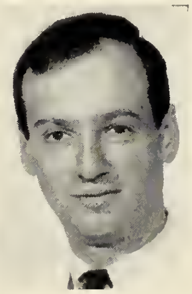
Our technique of intrauterine transfusion of the fetus has been detailed elsewhere.[14] The procedure is performed under fluoroscopic control, utilizing an image intensifier with television monitoring. A preliminary scan is performed to ascertain fetal position. A 12-inch #18 needle closely fitted with a #16 Teflon sleeve* is directed toward the fetal abdomen and passed through the maternal abdominal wall, uterine wall, amniotic sac and into the fetal peritoneal cavity. At this point, 3 ml of 50 per cent Hypaque® are injected and observations made for spillage over the fetal bowel or collection under the fetal diaphragm. When correct position in the abdominal cavity is assured, the Teflon sleeve is advanced slightly, and the needle withdrawn. A pre-determined amount of fresh, packed O (—) red cells, which have been cross-matched against the mother, are infused over a 20-minute period.

Fetal heart tones, as well as catheter position are monitored periodically during and at the conclusion of the procedure. The patient is hospitalized overnight, and discharged the following morning.

Since December 1963, when amniotic fluid analysis was initially instituted at Women's Hospital, we have performed 253 spectrophotometric analyses of amniotic fluid. These fluids were from 135 patients, 69 of whom were receiving their antepartum care at Women's Hospital. The remainder were patients who were either referred for amniocentesis, or those whose amniotic fluid specimens had been mailed by the referring physician.

* * *

THE CORRELATION between prognosis based on amniotic fluid analysis and fetal outcome has been good. There has been an occasional patient in whom



Co-author
Robert B. Jaffe, M.D.

---

*Longdwel needle. Beckton Dickinson Company.

ABSTRACT—A method for the diagnosis and treatment of severe erythroblastosis fetalis in utero is discussed. Evaluation of the degree of severity of the disease is based on determinations of spectral absorption of amniotic fluid in the 450 mμ region. If spectral absorption curves indicate severe affection with hemolytic disease, intrauterine transperitoneal transfusion of the fetus with fresh, packed O (—) red cells is performed. An outline of the procedures employed, rationale, and results is presented.

amniotic fluid analysis fell in the "lower mid-zone," although the fetus was mildly or nonaffected. Otherwise, the results of fluid analysis compare well with those of Liley. Since November 1964, we have performed 33 intrauterine fetal transfusions in 18 patients. Seventeen of these have now delivered. Nine of hese pregnancies terminated in the births of live babies, all of whom required exchange transfusion. Two infants died of respiratory distress syndrome; he remainder are alive and well, the oldest being age 4 months.

To date, there has been no evidence of permanent mpairment in the survivors. In four patients, a mear was made of cord blood and stained with Hematoxylin and Erythrocin B to distinguish between etal and adult cells on the basis of differential staining of fetal and adult hemoglobin. It was found hat between 71 and 92 per cent of the total cord ell population were adult cells. This suggests, albeit ndirectly, that the transfused adult cells are passing ntact into the fetal circulation. Studies to assess the er cent of cell uptake as well as cell survival are ow in progress.

Although it is realized that intrauterine fetal transusion is not the ultimate solution to the problem of emolytic disease, it has proved helpful in some inants who otherwise would have succumbed to anemia ith corollary hydrops and cardiovascular collapse. revention of sensitization is obviously the ideal, and n investigative program for immunization of the Rh egative patient who has not previously been sentized is now under way at the University of Iichigan.

ACKNOWLEDGMENT

We are indebted to Dr. Joseph Pittelli for the nalysis of fetal and adult hemoglobin in cord blood.

REFERENCES

. Landsteiner, K.: Uber agglutinationserscheinungen normalen menschlichen blutes. Wien. Klin. Wschr. 14:1132, 1901.

. Levine, P., Burnham, L., Katzin, E. M., and Vogel P.: The role of isoimmunization in the pathogenesis of erythroblastosis fetalis. Am. J. Obst. & Gynec. 42:925, 1941.

. Coombs, R. R. A., Maurant, A. E. and Race, R. R.: Detection of Weak and "Incomplete" Rh Agglutinins: A New Test. Lancet 2:15, 1945.

. Diamond, L. K.: Replacement transfusion as a treatment for erythroblastosis fetalis. Pediatrics 2:520, 1948.

5. Bevis, D. C. A.: The composition of liquor amnii in haemolytic disease of the newborn. J. Obst. & Gynec. Brit. Emp., 60:244, 1953.
6. Liley, A. W.: Liquor amnii analysis in the management of the pregnancy complicated by rhesus sensitization. Am. J. Obst. & Gynec. 82:1359, 1961.
7. Schrader, F. J., Marshall, B. R., Work, B. A. and Evans, T. N.: Amniotic fluid spectral absorption in the management of Rh sensitization. Mich. Med. 64:258, 1965.
8. Barton, D. M. and Stander, R. W.: Physical properties of amniotic fluid in erythroblastosis fetalis. Am. J. Clin. Path 42:602, 1964.
9. Queenan, J. R. and Adams, D. W.: Amniocentesis for prenatal diagnosis of erythroblastosis fetalis. Obst. & Gynec. 25:302, 1965.
10. Crosby, W. M. and Merrill, J. A.: Spectrophotometric analysis of amniotic fluid. Am. J. Obst. & Gynec. 92:53, 1965.
11. Bowes, W. A., Jr., Drose, V. E. and Bruns, P. D.: Amniocentesis and intrauterine fetal transfusion in erythroblastosis. Am. J. Obst. & Gynec. 93:823, 1965.
12. Weinberg, A., Shapiro, G., and Bruhn, D. F.: Isotopic placentography: an evaluation of its accuracy and safety. Am. J. Obst. & Gynec. 87:203, 1963.
13. Liley, A. W.: Intrauterine transfusion of foetus in haemolytic disease. Brit. Med. J. 2:1107, 1963.
14. Work, B., Jaffe, R. B., Campbell, C. and Whitehouse, W.: A technic of intrauterine transfusion of the fetus. Obst. & Gynec. 27:319, 1966.

Stay healthy with regular Cancer Check-ups. See your doctor or call for appointment at your U/F Cancer Detection Center . . . 833-0710. Do it now. Do it Once a Year.

**MICHIGAN
CANCER
FOUNDATION**

4811 John R, Detroit
Phone 833-0710

ORIGINAL SCIENTIFIC ARTICLE

ABSTRACT—A case of chronic restrictive pericarditis, apparently the result of a Beck I procedure for coronary heart disease, is described. Operative correction was necessary. Microscopically, the resected pericardium revealed a marked foreign body reaction between the visceral and parietal layers. The pathology of the lesion is discussed. This is thought to be the first case of this type to be reported.

Restrictive Pericarditis: A New Complication of the Beck I Procedure

By David K. Meriney, M.D.
Ann Arbor

INTRODUCTION

The Beck I procedure, introduced in 1935 to revascularize the heart in coronary artery disease, has never been widely accepted as a definitive surgical procedure for this condition; however, it continues to be performed in some centers. The purpose of this paper is to report a case of restrictive pericarditis produced as a late complication of the Beck I operation and to discuss the pathology of the lesion.

CASE REPORT

The patient was a 42-year-old white male who was in good health until December, 1959, when he experienced an episode of exertional left chest pain, with radiation down the left arm, lasting several hours. He was hospitalized and diagnosed as having myocardial infarction. An electrocardiogram showed complete left bundle branch block. Over the ensuing eight months, the patient had recurrent episodes of nonradiating left chest pain lasting two or three hours. The pain was said to be exacerbated by exertion or emotion.

A modified Beck I operation was performed on January 31, 1961. After opening the pericardium, a Beck burr was used to abrade the parietal pericardium and the visceral pericardium over the anterolateral portion of the left ventricle. A rather large amount of asbestos and talc powder was inserted and insufflated into the pericardial cavity, and the pericardial cavity was closed. The internal mammary artery was ligated and divided. On the ninth postoperative day, the patient developed pericardial effusion with associated dyspnea and chest pain. A pericardiocentesis was performed with relief of symptoms and patient was discharged on February 27, 1961.

* * *

BECAUSE OF PERSISTENT chest pain and dyspnea, chest fluoroscopy was performed on March 21, 1961, revealing massive cardiac enlargement of a globular type with diminished pulsations. Pericardiocentesis was again performed. On April 4, 1961, he was admitted for the third time because of recurrent pericardial effusion, and a pericardial fenestration was carried out. A window of pericardium 3 cm in diameter was removed. As the pericardium was opened, a large amount of fluid flowed out under pressure. The microscopic section revealed a central zone of foreign body reaction, with foreign body and foreign body giant cells.

The patient continued to have "pressure" feelings in the chest with exertion and at rest. Dyspnea on exertion and ankle edema were present, and he was admitted for study in March, 1963.

Family history revealed that many of the patient's relatives on the maternal side were alleged to have died of "heart disease," though details were unknown. The patient was known to have a chronically heavy alcoholic intake.

* * *

ON PHYSICAL EXAMINATION the blood pressure was 118-108/76. The pulse rate was 88 with

The Author
David K. Meriney, M.D.

Resident, Internal Medicine. From the Department of Internal Medicine, The University of Michigan Medical School, Ann Arbor, Michigan.

definite paradoxical pulse. The patient presented dusky appearance. Grade II arteriosclerotic hanges were noted on fundoscopic examination. Slight istention of the neck veins at 45° was noted with o visible hepatojugular reflux. The lungs were clear percussion and auscultation. Cardiac examination evealed a diastolic outthrust on palpation. The left order of cardiac dullness was percussed just out-de the midclavicular line. A protodiastolic extra ound was heard along the left sternal border and the cond sound at the base was split. No murmurs were eard. On examination of the abdomen the liver as felt three finger breadths below the right costal argin. Two-plus pitting edema was present in both wer extremeties.

Laboratory studies included a WBC of 8000 with hematocrit of 47.5 vol per cent. Urinalysis revealed 2 plus protein. Serum creatinine was 0.98 mg per nt. Venous pressure was 190 mm saline and De-olin circulation time, arm-to-tongue, was 29 sec-nds. Chest x-ray showed cardiomegaly and pul-onary congestion suggestive of cardiac failure. EKG owed complete left bundle branch block. An old berculin skin test, performed at a later date, was sitive.

The patient was treated with digitalis, chlorothi-ide, mercurial diuretics, and low salt diet. A 20-und diuresis resulted with symptomatic improve-ent.

* * *

CARDIAC CATHETERIZATION and angio-aphy were carried out on May 1, 1963. The mean ht atrial pressure was 11 mm Hg. The right ven-icular pressure was 40/20 mm Hg and the right ntricular pressure pulse showed an M-shaped con-ur with an early diastolic dip characteristic of ricarditis. Pulmonary artery pressure was 40/28. n angiocardiogram done from the superior vena va was compatible with restrictive pericarditis. A ht coronary arteriogram was normal. A study of e left coronary artery was technically unsatisfactory.

On July 24, 1963, he was readmitted for operative rrection of his restrictive pericarditis. The peri-rdium was incised from phrenic nerve to the oppo-e phrenic nerve and from the base of the heart to e outflow tract of the ventricles. Pieces of peri-rdium were removed from the superior and inferior na cava. With the pericardium removed, some nprovement in motion of the heart was noted, ough it was not considered optimal. An attempt as made to remove some epicardium which was stricting; however, this resulted in perforation of the ntricle and had to be abandoned. The ventricular yocardium appeared thin and not of normal quality.

Posterior to the heart was a large collection of for-gn material, presumably talcum powder or asbestos, which was removed, followed by saline irrigation of the pericardial sac.

* * *

ON GROSS examination, the pericardium was 9 mm thick with nodular areas of overgrowth appearing to be related to silk suture material. Microscopically, a marked foreign body giant cell reaction was seen between the visceral and parietal layers of the pericardium. A severe productive inflammatory response was seen in this area. The foreign material was grey-green, forming long narrow plates and needles, and was anisotropic. The pathologic diagnosis was pericardium, foreign body giant cell reaction (Figures 1 through 4).

Postoperatively, the patient was minimally improved, and evidence for fluid retention was still present. He was discharged on digitalis leaf 0.1 gm daily and an 800 mgm sodium diet. During subsequent outpatient visits, persistent neck vein engorgement was noted, and fluid retention and increasing dyspnea remained a problem.

DISCUSSION

Deterling and Humphreys[1] have emphasized certain factors which appear to be important in the development of the clinical syndrome of restrictive pericarditis: (1) Prolonged exposure of the pericardium to irritant or damaging agents, such as tubercle bacilli, foreign bodies or partially organizing blood clots; (2) extensive pericardial involvement rather than discrete localization; (3) varying degrees of pericardial compression or restriction in association with myocardial damage due to disease or injury.

In the case described in this paper, the diagnosis of chronic restrictive pericarditis seems well supported by the clinical and pathologic findings as well as the results of cardiac catheterization. To our knowledge, this is the first instance in which such a syndrome has apparently been the result of a Beck I procedure. It is not known to what extent powdered talc, asbestos or mechanically irritating procedures may have been important in the production of the lesion, although a foreign body reaction seems to have been instrumental in its pathogenesis. The description of the foreign material in this case is not that usually seen with asbestos. Postoperative pericarditis has been reported in about 10 per cent of all direct operations on the heart, but constriction has not been noted to develop.[2]

Experimentally, introduction of talc into the pericardium of the dog has been used to produce adhesions of the pericardium to the epicardium.[3] Widespread adhesions beyond the area of the powder did not occur, and restrictive pericarditis was not described. On the other hand, Yodice[4] has described chronic compression of the heart produced by introduction of iodized talc into the pericardium of the dog, but did not give the microscopic appearance of the pericardial tissue. It should be noted that powdered talc is not used routinely by all surgeons in the Beck I procedure.[5]

Experimental production of restrictive pericarditis with asbestos has not been well documented; however, nodular lesions have been produced on guinea pig peritoneum, a tissue similar to the pericardium, by intraperitoneal injection of suspensions of talc or asbestos.[6] Seven days after injection of a 5 to 10 per cent suspension of such substances, nodules appear with surrounding fibroblasts penetrating the dust mass. Macrophages, at first scarce, increase up to the 60th day after which time connective tissue cells predominate. Necrosis was not noted. Productive inflammation does not occur, and the significance of the reaction is uncertain.

Summary

A case of chronic restrictive pericarditis, apparently the result of a Beck I procedure for coronary heart disease, is described. To our knowledge, this is th first case of this type to be reported.

Acknowledgment

I wish to acknowledge the editorial assistance an suggestions of Dr. Mary Clifford and Dr. Ernes Reynolds in preparing the manuscript.

References

1. Deterling, R. A., and Humphreys, G. H.: Factors i the etiology of constrictive pericarditis. Circulatio 12:30, 1955.
2. Wood, P.: Chronic constrictive pericarditis. Amer. J Cardiology 7:48, 1961.
3. Thompson, S. A.: Development of cardio-pericardia adhesions following use of talc. Proc. Soc. Exp. Biol and Med. 40:260, 1939.
4. Yodice, A.: Compression of the heart produced experimentally. Surg. Gyn. & Obst. 73:277, 1941.
5. Beck, C. S.: Coronary heart disease after 25 years. J Thoracic Surg. 36:329, 1958.
6. Miller, J. W., and Sayers, R. R.: The physiologica response of peritoneal tissue to certain industrial an pure mineral dusts. Public Health Reports 51:1677 1936.

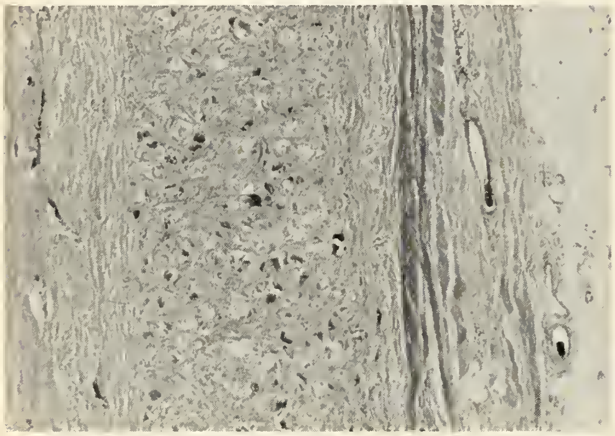


Figure 1. Microscopic appearance of the pericardium showing the foreign body reaction between the visceral and parietal layers.

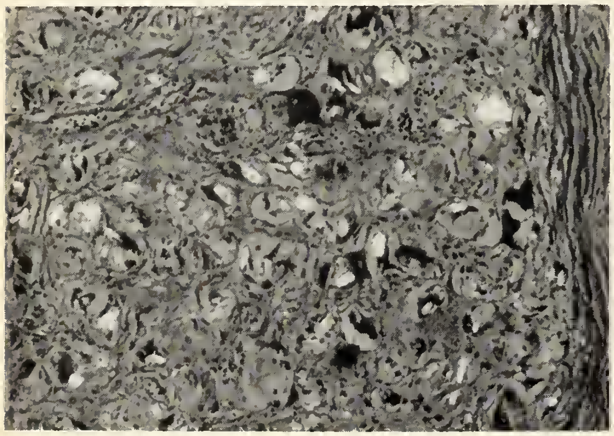


Figure 2. A closer view of the foreign body reaction with partially polarized light, showing the foreign material.

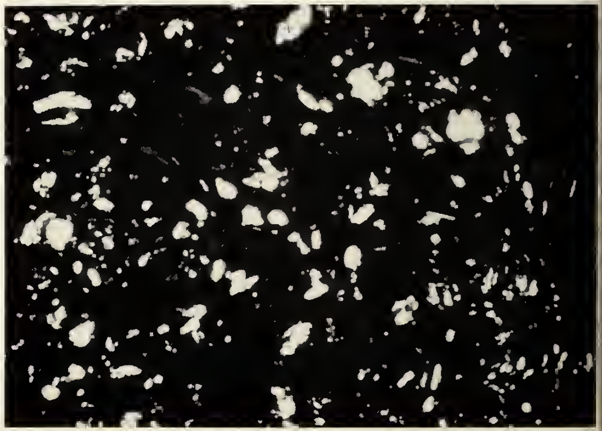


Figure 3. The same area as shown in Figure 2 wit polarized light, demonstrating the foreign crystals t greater advantage.

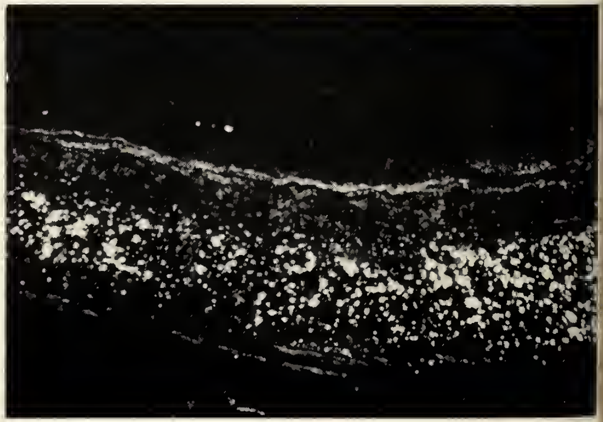
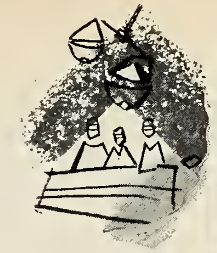


Figure 4. A lower power view of the pericardiu with polarized light, demonstrating the extent of th foreign material.

ABSTRACT—This paper describes in detail a case of multiple atheromatous embolization following abdominal aortic surgery for arteriosclerotic aneu-rysmal disease. This condition is not at all infrequent, but the diagnosis is seldom made antemortem and the treatment is very unsatisfactory. The anatomo-pathologic condition is well documented; the possible mechanisms of its production, dissemination, and prevention are discussed.



ORIGINAL SCIENTIFIC ARTICLE

Multiple Atheromatous Embolization After Aortic Surgery

By F. Gonzalez Crussi, M.D.
Omero S. Iung, M.D.
Robert G. Combs, M.D.
William H. Meade, M.D.
All of Lansing

Immediate postoperative complications of aortic urgery are to be regarded with the greatest respect. Patients undergoing this type of surgery tend to have eneralized arteriosclerosis and associated diseases.

The prognosis should be considered especially omi-ous if the immediate complication is clinically mani-ested by renal failure, because the mortality has been stimated to be as high as 90 per cent in some series.[15] As a result, many plausible efforts have been under-aken, tending to minimize the incidence of renal ailure associated with aneurysmectomy. Reflex reno-ascular spasm after clamping of the aorta is believed y many investigators to lead to the development of tubulorrhectic" nephrosis.

Thus, systemic ganglionic blockade, infiltration of ne renal pedicle with local anesthetics, and Mannitol ntravenous infusion have all been employed, at one me or another, as agents effective in the prevention f the phenomena that culminate in necrosis of the nal parenchymal cells.[1,3,11]

* * *

IN SOME CASES, however, a different mechan-m operates which leads to lesions resembling "renal cortical necrosis" rather than acute tubular necrosis. Clamping of the aorta fractures atheromatous plaques and the liberated atheromatous debris along with bits of superimposed thrombi are churned and carried in the circulation to the nearest vessels. True infarcts are produced in this manner, not only in the kidneys, but in other organs as well, as illustrated in the case reported here. It is well known that atheromatous emboli occur spontaneously, not only as a complication of surgery.[6] Just how frequently this complication is observed is by no means clear, but we are of the opinion that it is not as sporadic as the sparsity of case reports might suggest, and we feel that more autopsy-documented cases should be published in order to have a clearer picture of the pathogenic mechanisms and morphology of the lesions which may well prove to be the basis of a better therapeutic, prognostic and prophylactic rationale in the future.

Case Report

A 58-year-old white male was admitted to St. Lawrence Hospital, Lansing, Michigan, on September 6, 1964, with the chief complaint of abdominal pain localized in the right lower quadrant and referred to the back. This began the day before, and persisted during the night. He received a hypodermic of Demerol and Vistaril to control the pain. He was restless and uncomfortable, but had no chest pain or difficulty in breathing. On the day of admission he sat up on the edge of the bed and suddenly fainted.

* * *

THE PAST HISTORY showed that he had been in good health practically all of his life; however, for the past two years he had some difficulty in walking with intermittent claudication of both thighs and calves. He had been a heavy beer drinker and cigarette chain smoker for years.

Upon admission blood pressure was 128/96, pulse 140 and regular, and temperature 96.6 F. A routine urinalysis showed a specific gravity of 1.031, albumin one plus and a negative test for glucose and acetone. Microscopic examination of the urine showed 5-6 red

---

Doctor Crussi is Resident in Pathology, St. Law-nce Hospital, Lansing.

Doctor Iung is Attending Surgeon, St. Lawrence ospital, Ingham Medical Hospital and Sparrow ospital, Lansing.

Doctor Combs is Attending General and Plastic urgeon, St. Lawrence Hospital, Ingham Medical ospital and Sparrow Hospital, Lansing.

Doctor Meade is Chief of the Department of Sur-ry, St. Lawrence Hospital; Attending Surgeon and onsultant, St. Lawrence Hospital, Ingham Medical ospital and Sparrow Hospital, Lansing.

blood cells, and 0-2 white blood cells, and many coarse granular and hyaline casts per high power field.

A complete blood count revealed a hemoglobin of 15.5 grams per cent, hematocrit of 50 per cent and a white blood count of 24,150 with the following differential: Polys 80 per cent, stabs 10 per cent and lymphocytes 10 per cent. The lungs were clear to percussion and auscultation. The heart sounds were normal. The abdomen was protruding with tenderness and muscle guarding in the right lower quadrant. The bowel sounds were depressed. No masses were palpated. Roentgenograms of the abdomen were obtained and showed an ileus involving primarily the right colon and no evidence of free air or abnormal masses. Prominent calcification of the distal abdominal aorta was noted. The diagnosis of an acute appendicitis was entertained and the patient taken to surgery.

Anesthesia was induced with intravenous sodium pentothal. The patient was intubated and maintained with nitrous oxide, oxygen and fluothan (Halothane). The latter agent was discontinued after a drop in blood pressure. Anectine was given for muscle relaxation. The abdominal cavity was entered through a right lower quadrant incision, muscle splitting in type.

The appendix was found to be normal. An abdominal aortic aneurysm was palpated and appeared to be ruptured. The right lower quadrant incision was immediately closed and a vascular team (RGC and OSI) was summoned. A large incision from the xyphoid down to the symphysis pubis was made, resection of the aneurysm was done and replaced with a Teflon graft running from the aorta to the common iliac on the right and to the common femoral on the left side. Endarterectomies of the common and external iliacs and femoral arteries were carried out. The estimated total blood loss was 2,400 cc, and the patient received 2,500 cc of whole blood, and 1,500 cc of 5 per cent glucose in normal saline with Chloromycetin 500 mg in one of the bottles. The procedure lasted four hours and 50 minutes.

* * *

THE AORTIC aneurysm measured about 12 cm in its greatest diameter. The rupture had occurred in its medial wall with dissection of blood superiorly and inferiorly around the inferior vena cava and extending into the right iliac fossa. There was no free blood in the abdominal cavity. The retroperitoneal extravasated blood and clots were estimated to make a volume of about 300 cc which was not considered in the total blood loss picture. It was noted that within the aneurysm there were layers of old and freshly clotted blood.

The most striking feature, although not infrequently found, was the "corn meal" appearance of the lining of the aneurysm wall. This softly fragmented material extended up in the aorta to the level of the clamp. Postoperatively there was a hypotensive period lasting 36 hours which terminated in death. To treat this severe hypotensive state a vigorous and intensive fluid and medical program was carried out consisting of blood 1,500 cc, Osmitrol (Mannitol 10 per cent solution) 2,000 cc, 5 per cent glucose in normal saline 2,000 cc and 5 per cent glucose in water 1,500 cc. The patient was digitalized rapidly.

The following drugs were administered intravenously: Thorazine (Chlorpromazine) 20 mg, Aramine (Metaraminal) 50 mg, calcium chloride one gram, sodium bicarbonate 44.6 mEq, and a "cardiac tonic" consisting of Aminophylline 500 mg and Thiomerin (Mercaptomerin sodium) 2 cc in 250 cc of 5 per cent glucose in normal saline on three separate occasions. As a last measure Solu-Cortef (Hydrocortisone) 200 mg was given twice intravenously in addition to 100 mg IM q three hours for a total of six doses. These medications failed to raise the blood pressure.

The urinary output in the first 24 hours following surgery consisted of 150 cc, and for the next eight hours before death ensued, it was 6 cc by actual measurement. Nasogastric suction by the Gamco machine produced a total of 1,050 cc for the 36-hour period. During this same time the total input was calculated to be 7,000 cc and the total output 1,210 cc.

* * *

APPROXIMATELY ten hours after surgery on the morning of September 7, 1964, the patient suddenly shouted, gasped and became cyanotic. The blood pressure dropped to 0/0, the pulse and respiration stopped. Artificial respiration and closed chest cardiac massage were administered with a successful response. His color improved and he became conscious. An electrocardiogram was obtained and showed nonspecific myocardial changes possibly due to ischemia. An anteroposterior portable chest x-ray revealed a patchy zone of infiltration of the right base, suggestive of an early pneumonia or focal atelectasis.

The patient appeared to manifest air hunger with shallow somewhat rapid respirations with a rate between 24 and 28 per minute. Auscultation of the chest did not reveal any moist rales, but the breath sounds were definitely decreased in the right base. The heart sounds were regular with a rapid rate of

Co-author
Omero S. Iung, M.D.

110 per minute. The abdomen was somewhat distended and tympanitic but not hard. There was no evidence of external blood loss, but the possibility of an intra-abdominal bleeding could not be entirely ruled out since there were no drains in the abdominal cavity or retroperitoneal space. The lower extremities had no edema, but the skin had a blotchy cyanotic appearance. The posterior tibial and dorsal pedal pulses could not be palpated.

In the evening of September 7, 1964, the patient had a very large bowel movement, the stool was described by the nurse as being brown and soft. On the following morning he had another bowel movement without evidence of blood. Later in the morning of September 8, 1964, the patient became cyanotic while receiving intermittent positive pressure breathing by means of the Bird machine, and his heart stopped. Resuscitation was attempted, but failed. The patient was pronounced dead at 10:20 a.m. on the morning of September 8, 1964.

Additional laboratory studies consisted of an electrolyte survey on September 7, 1964, which showed chloride 81, sodium 117, potassium 5.7 and CO_2 18.5 mEq per liter. A blood urea nitrogen examination on that same day was 22 mg per cent. A fibrinogen determination test was in the normal range of 250 to 400 mg per cent. The hemoglobin was 11.7 grams per cent and the hematocrit 40 per cent.

Autopsy Protocol

Autopsy was performed after arterial embalming. The most striking findings were confined to the abdominal cavity. The surgical incisions were not remarkable. Abdominal distention was present and approximately 800 cc of sero-sanguineous fluid was found in the peritoneal cavity. The liver weighed 1,800 grams and showed diffuse, irregular, yellow tan, sharply demarcated pale areas, particularly in the left lobe. These areas contrasted sharply with the adjacent liver parenchyma, resulting in a "geographic" pattern. The pancreas weighed 150 grams and appeared markedly edematous, showing extensive areas of hemorrhage and foci of fat necrosis appearing yellowish and gritty. The spleen weighed 210 grams and was intensely congested.

Obvious areas of hemorrhage were seen, as well as zones of ischemic infarction in a predominantly subcapsular distribution. The adrenals were not remarkable grossly, in spite of extensive changes found under the microscope, a fact which is not uncommon. A 2-5 cm mucosal erosion was seen in the cardioesophageal junction which exposed a clean submucosa with congested vessels, but no evidence of bleeding.

* * *

THE KIDNEYS were markedly abnormal. The right kidney weighed 200 grams and the left 175 grams. The outer surfaces appeared smooth, the capsules were tense but thin and non-adherent, and the parenchyma was mildly edematous, and bulged slightly when the capsules were cut. Pale areas of ischemic infarction, irregular in shape and similar to those in the liver, were present. These infarcts showed a striking cortical distribution with relatively little involvement of the medulla. Sometimes the necrosis appeared to extend medially, but it did so following the columns of Bertin. Some medullary extension was also detected, but it did not appear to be of equal proportion to the cortical infarcts, as expected in typical infarction (Figure 1).

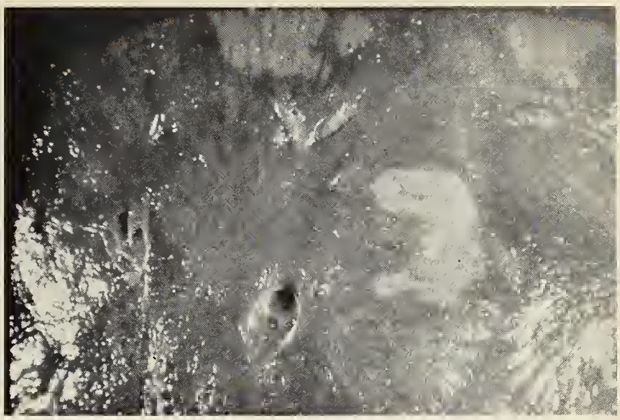


Figure 1. Close-up view of the cut surface of the left kidney. Pale, well circumscribed areas of infarction involving the cortex and extending along columns of Bertin, but with little involvement of the medulla.

Additional findings were good preservation of the suture lines of the arterial graft, a small hematoma estimated to make approximately 400 cc in the right retroperitoneal space, and surrounding the right kidney; moderately severe coronary atherosclerosis; patchy scarring of the myocardium; left ventricular hypertrophy; areas of pulmonary atelectasis and marked atherosclerosis of the descending aorta above the level of the graft.

Microscopically, the impression of ischemic infarction in the above-mentioned organs was corroborated. The kidneys showed sharply demarcated areas of death of cells without appreciable distortion of the general histological structure. There was no shrinkage or framework collapse.

Again, the predominantly cortical distribution of the lesions was apparent. Most of the infarcts were not surrounded by significant cellular inflammatory infiltration, but appeared bordered by areas of parenchymal degenerative changes and hyperemic glomeruli (Figure 2). Small arterioles mostly arcuate and interlobular, contained embolic material.

* * *

DESPITE THE severity of the aortic atherosclerosis there was comparatively little renal arteriosclerosis (Figure 3). The areas of ischemic infarction in the liver were frequently bordered by a rim of hemorrhagic parenchyma containing polymorphonuclear leukocytes. Again, death of cells with preservation of the architecture, characterized the lesions (Figure 4). Extensive necrosis and hemorrhage was present in the adrenals. Several arterial channels in the periadrenal fat were plugged with embolic atheromatous material containing cholesterol clefts (Figure 5). Spleen and pancreas were similarly affected. Unquestionably embolic atheromatous material was present in the nutrient vessels, frequently at the arterial bifurcations (Figure 6 and Figure 7).

DISCUSSION

The objection was raised to us that the lesions could represent a peculiar form of localized atherosclerosis, as some of the fragments seemed to be "attached" to the vessel walls in some of our photographs, and that multiple infarcts could be a complication of the same disease. However, there can be no question about the embolic nature of the lesions. The arguments in favor of this interpretation have been set forth by Thurlbeck and Castleman in their excellent communication on renal atheromatous emboli after aortic surgery.[14]

Briefly enunciated, these criteria are: (1) The emboli are morphologically identical with fragments of atheromatous material. (2) They lie chiefly at the arterial bifurcations, as illustrated in Figure 6. (3) They occur independently of the severity of local intrarenal vascular disease. And (4) the infarcts can be dated and known to occur at the time of surgery. These criteria were sufficiently fulfilled in our case in

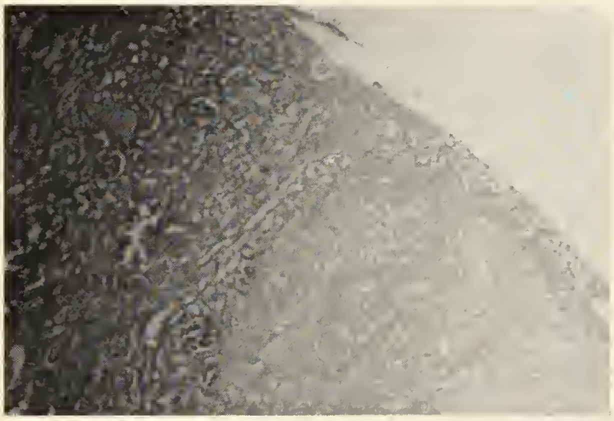


Figure 2. Microscopic appearance of a zone of infarction in the renal cortex. Note the pale staining histologic structures indicating death of cells, with good preservation of the architecture. The neighboring parenchyma exhibits intense glomerular hyperemia and mild architectural disruption (Hematoxylin and Eosin, original magnification 100 x).

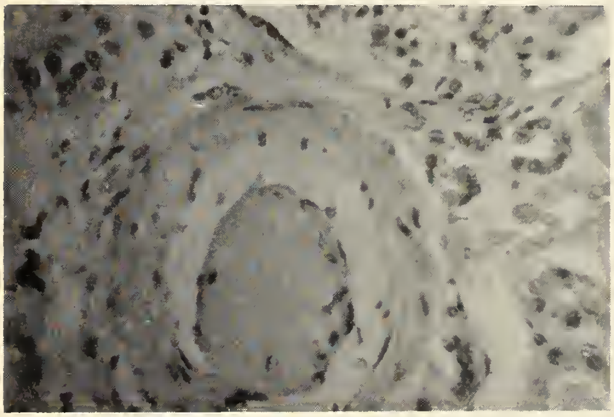


Figure 3. Renal arteriole containing hyaline embolic material. Part of a glomerulus is seen in the upper right corner of the illustration. (Hematoxylin and Eosin, original magnification 900 x).

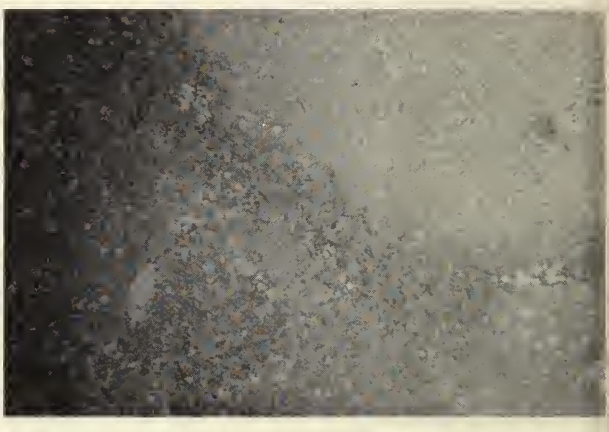


Figure 4. Zone of hepatic ischemic infarction. Pale staining microscopic appearance with loss of cellular detail, but preservation of lobular arrangement. The poorly staining infarct is bordered by a rim of hemorrhagic necrosis and inflammatory infiltrate (Hematoxylin and Eosin 100 x).

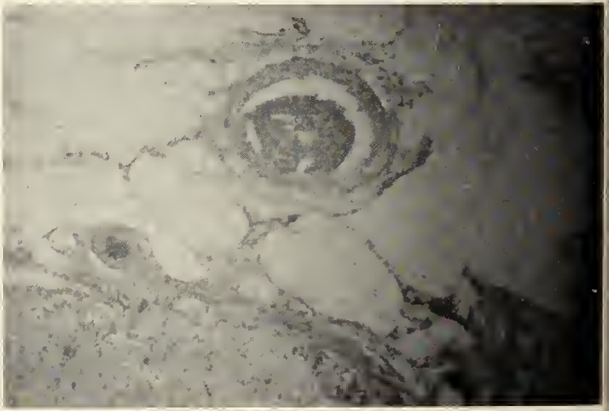


Figure 5. Arteriole in periadrenal adipose tissue containing embolic atheromatous material in which cholesterol crystals are present. Note absence of intrinsic vascular disease. A part of the adrenal cortex is seen in the lower left corner of the picture (Hematoxylin and Eosin 430 x).

which there was remarkably little intrarenal arterial disease despite the severity of the abdominal aortic atherosclerosis. But most important of all, the lesions were patently embolic because small arterioles were affected which are not usually the seat of atherosclerosis, and as Gore has pointed out, "Certainly not the seat of atherosclerosis with a crystalline moiety, and crystals of a length approximately equal to the lumen of the affected vessel."[5]

* * *

THE TYPE OF emboli most commonly found appeared composed of fragments of structureless acellular hyaline material containing cholesterol clefts. Occasionally, jagged hyaline material alone was present in smaller vessels. We did not find emboli composed of single cholesterol crystals, as were observed by Thurlbeck and Castleman[14] in smaller arteries. Thrombosis did not seem to be an important component of the lesions. It is of interest to note that the renal arteries and their major branches were patent. As seems to be frequently the case, the emboli could not be seen with the naked eye, and were not discovered until microscopic study of the tissues removed at autopsy was completed.

Atheromatous embolization has been recognized by the pathologists for many years. We believe that this condition occurs more frequently than is ordinarily assumed.

At least 20 years have passed since the first detailed description by Flory,[4] and yet, it is rather surprising that post-mortem studies do not disclose this pathologic mechanism more often, in view of the high prevalence of severely atherosclerotic aortas in the adult population. There are several possible explanations to this apparent paradox. One is that the atheromatous emboli usually travel to the lower extremities because, in humans, large eroded aortic atheromatous plaques tend to occur most commonly just proximal to the bifurcation.[2] Therefore, the pathologist would miss the lesions, as even meticulously performed routine autopsies frequently fail to include the study of the lower extremities.

Secondly, one might assume that atheromatous embolization occurring during life may not be easily identifiable microscopically at autopsy, as it is conceivable that chronic inflammatory changes and superimposed phenomena may modify the morphology of the lesion to the point where prompt detection is not feasible. In this connection, the investigations conducted by Gore are of great interest.[5] Gore has found that cholesterol crystals introduced intravenously in rats or rabbits may be seen nine months later. Still one could speculate that changes in morphology can develop later which would make interpretation by routine histological methods a difficult task. Even in the acute stage the lesions may be mistaken for a panarteritis. Only sections taken at a proper level will reveal the pathology as pointed out by Zak.[18]

FINALLY, A THIRD inescapable speculation, not entirely without support, is that the embolic fragments of atheromatous debris can be destroyed by the "defense mechanisms" of the host. This is in agreement with the findings of Otken,[10] who produced experimental atheromatous embolization in rabbits and suggested that cholesterol crystal emboli can be converted by the host organism into a soluble state and disappear.

Presently, when a diagnostitian is confronted with a case of sudden multiple peripheral vascular occlusions, the immediate consideration is that of

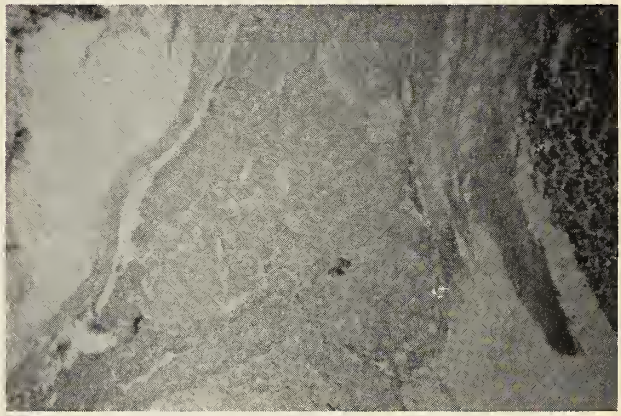


Figure 6. A splenic arterial channel containing embolic material within "cholesterol clefts" of biconcave crystal spaces. The main branch is seen in the upper central portion of the photograph. The dichotomy is in the center and the resulting branches in the right and left lower corners. Characteristically embolic occlusion is seen at the sites of bifurcation (Hematoxylin and Eosin, original magnification 400 x).

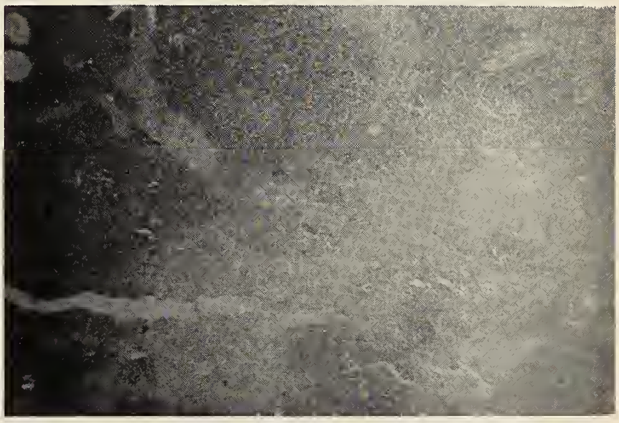


Figure 7. Splenic infarction corresponding to occluded vessel shown in Figure 6 above. Note the pale staining appearance with loss of cellular detail (Hematoxylin and Eosin, 100 x).

multiple emboli originating in the chambers of the heart, or from the heart valves.

Much less commonly is the attention focused on the walls of the aorta, which are very frequently the site of thrombus formation in severe atherosclerosis. In fact, mural thrombi in the wall of the descending aorta have been described as occuring in an otherwise normal vessel, and believed to constitute a form of "an anatomically definable disease of thrombosis,"[16] in which thrombus formation is not casually related to any intrinsic abnormality of the vessel wall, although "the fortuitous existence of certain abnormalities of structure offers preferential sites of localization for the thrombi."[16] Thrombi, sometimes quite large, can break off along with pieces of atheromatous plaques to occlude peripheral vessels and cause massive infarcts.

Indeed, cases of multiple peripheral emboli originating in the aortic wall have been well documented in the literature, and when they occur spontaneously they are known to give rise to a variegated clinical picture that is extremely difficult to diagnose.[13] Needless to say, a stronger suspicion should arise when the antecedent of rough handling or manipulation of a large atherosclerotic vessel is present in the history.

The sudden catastrophic derangements associated with atheroemboli as seen in the case here reported should alert us to future instances of a similar clinical course. It is hoped that nonfatal cases will be diagnosed, treated, carefully evaluated and reported in the future. Until 1962, only seven cases of spontaneous atheroembolic renal failure had been described.[9] Clearly, many cases of hypertension originate in this manner, a fact which should be quite obvious in these days of exhaustive study of the role of the kidneys in hypertension.[12,17]

* * *

THE AVENUES for investigation are numerous and some have already been delineated. Probstein, for instance, has clearly established that — atheromatous embolization is definitely implicated in the etiology of some cases of acute hemorrhagic pancreatitis.[12] It is not a farfetched supposition to say that the same etiology must account for at least some cases of the nebulous entity of "postoperative" pancreatitis, particularly if nearby atheromatous vessels were traumatized. In our case, there was microscopic evidence of severe pancreatitis, clearly related to atheroemboli in the pancreatic arterioles.

It is interesting to note that emboli occurred in the branches of the celiac, the renal, and adrenal arteries. Presumably this specific localization is a direct result of considerable turbulance of the blood above the level of the clamp. The small intestine was not infarcted, and in a few routine sections of the branches of the superior mesenteric artery, no occlusions were present.

We were impressed by the striking gross resemblance of the kidney lesions to "renal cortical necrosis," as seen in premature separation of the placenta and other conditions. Clinically, the marked severity of the oliguria, rather than a slow gradual decrease in urinary output is thought to indicate renal cortical necrosis, and considered as a point helpful in the differentiation between the latter and the more common distal "tubular necrosis."

Anatomically, every infarct appeared related to a vessel harboring an embolus, but not all of the renal infarcts were studied by means of serial sections. Whether arterial spasm, precipitated or not by the emboli, and whether intravascular thrombosis, as seen in cortical necrosis, play a role of any significance in the production of the renal lesions, remains to be elucidated. The thought occurred to us that, had the patient lived longer, the typical anatomic picture might have appeared, because it has been postulated that a sequential series of periods of ischemia and return of blood flow are necessary for the production of typical cortical necrosis.[17]

In the case under discussion, however, extensive and severe ischemic infarcts in other organs, notably in the adrenals, produced irreversible shock and death before these sequential changes in blood flow could take place. The suggestion is advanced here that in similar cases in which thrombosis seems to be of importance, the presence or absence of pancreatitis and hypercoagulable state may be worthwhile of investigation.

* * *

FINALLY WE MUST confess our frustration for not having any definite suggestion to offer regarding the prevention of this serious complication. The measures recommended in the literature are not always applicable, and we are in need of some means of preventing this complication. Rough handling of the aorta is obviously to be avoided, but it is much easier to make this statement than to put it into practice, since relatively forceful clamping of the aorta is an unavoidable and necessary step in the surgical procedure. Clamping should be decisive, and re-clamping should be considered highly dangerous. "Flushing out" the vessel and other maneuvers are of doubtful value, since the initial crushing of the plaques seems to be all important. We can only point out the necessity of devising better prophylactic procedures.

Summary

A case is reported of fatal multiple intra-abdominal atheromatous embolization following surgery for aortic aneurysm. Anatomic features and pathogenesis

are discussed with review of the pertinent literature. The similarity of the renal lesions to "renal cortical necrosis" is emphasized. Mention is made of the traditional precautions tending to avoid embolization, but no new suggestions are added.

Bibliography

1. Barry, K. G., Cohen, A., Knochel, J. P., Whelan, T. J., Jr., Beisel, W. R., Vargas, C. A. and Leblanc, P. C.: The prevention of acute functional renal failure during resection of an aneurysm of the abdominal aorta. The New Eng. J. of Med. 264:967-970, May 1961.

2. Candiani, G.: Lostruzione da cristalli di colesterina delle grosse arterie delle estremita inferiori. Riv. anat. pat. e onc. 9:319-328, 1954.

3. Doolan, P. D., Wiggins, R. A., Thiel, G. B., and Martinez, E.: Acute renal insufficiency following aortic surgery: discussion of pathogenesis and consideration of gangrene of extremity as complication. Amer. J. Med. 28:895-904, 1960.

4. Flory, C. M.: Arterial occlusion produced by emboli from eroded aerotic atheromatous plaques. Amer. J. of Path. 21:549, 1945.

5. Gore, I.: in Evolution of the Atherosclerotic Plaque. Richard J. Jones, Ed. The University of Chicago Press, pages 315-322, 1963.

6. Gore, I., and Collins, P. D.: Spontaneous atheromatous embolization. Amer. J. of Clin. Path. 33:416, 1960.

7. Greendyke, R. M., and Akamatsu, Y.: Atheromatous embolization as a cause of renal failure. J. Urol. 83:231-235, 1960.

8. Handler, F. P.: Clinical and pathologic significance of atheromatous embolization with emphasis on etiology of renal hypertension. Amer. J. Med. 20:366, 1956.

9. Kaplan, K., Millar, J. D., and Cancilla, A. P.: Spontaneous atheroembolic renal failure. Arch Int. Med. 110:218-221, 1962.

0. Otken, B., Jr.: Experimental production of atheromatous emboli. A.M.A. Arch. of Path. 68:685, 1959.

1. Powers, S. R., Jr., Boba, A., and Stein, A.: Mechanism and prevention of distal tubular necrosis following aneurysmectomy. Surgery 42:156-162, 1957.

2. Probstein, J. F., Joshi, R. A., and Blumenthal, H. J.: Atheromatous embolization: Etiology of acute pancreatitis. A.M.A. Arch. of Surg. 75:566, 1957.

3. Sayre, G. P., and Campbell, D. C.: Peripheral emboli in atherosclerosis of aorta. Arch. Int. Med. 103:799-806, May 1959.

4. Thurlbeck, W. M., and Castleman, B.: Atheromatous emboli to the kidneys after aortic surgery. New Eng. J. of Med. 257:442-447, 1957.

5. Wantz, G. E., Guida, P. M., and Moore, S. W.: Immediate complications following abdominal aortic surgery. The Surg. Clin. of N. Amer. 44:469-481, April 1964.

6. Weiss, D. L., Jahiel, R., and Long, E.: Mural fibrin thrombosis of the descending aorta. A.M.A. Arch. of Path. 60:201-211, 1955.

7. Williams, F. T.: in Diseases of the Kidney. Strauss and Welt, Editors, Little, Brown & Co., pages 526-574, 1963.

8. Zak, F. G., and Kurt, E.: Embolization with material from atheromata. Amer. J. of Med. Sci 218:510-515, 1948.

About that Medical Evaluation for Sports:

(The following is taken from an AMA booklet, "A Guide for Medical Evaluation of Candidates for School Sports." A copy may be obtained from MSMS, Box 152, East Lansing.)

First among all considerations concerning the welfare of athletes is the preparticipation medical evaluation. The aims of the examination are to:

- Determine the health status of candidates prior to exposure to participation and competition;
- Provide appropriate medical advice to promote optimum health and fitness;
- Arrange for further evaluation and prompt treatment of remediable conditions;
- Counsel the atypical candidate as to the sports or modification of sports which for him would provide suitable activity;
- Restrict from participation those whose physical limitations present undue risk.

In some places, athletes are examined by their family physician on an individual basis. Where a school or team physician is available, he sometimes does the examining, or the local medical society, or health department has established an accepted procedure.

Nonetheless, these basic considerations are common to any arrangement:

(1) In fairness to the aspiring candidate, health examinations should be scheduled far enough before the beginning of practice or conditioning program to allow—if indicated—appropriate consultation, diagnosis, and treatment. They require ample space in a quiet room with reasonable privacy and no demands for undue haste.

(2) The evaluation should extend from the sport at question to all sports normally available to the youth in that community. Not all sports are of the "collision" or body contact variety. Approval for selected athletics may be possible even when there are conditions obviously disqualifying for sports of rigourous nature. One annual health examination would then suffice except when the candidate 1) has experienced a significant injury or illness since the last evaluation, or 2) the candidate has been encouraged after successful surgery and/or therapy to seek re-evaluation.

(3) The physician should be cautioned to avoid giving any guarantee that it will be safe for the candidate to participate. In addition, he should not undertake medical treatment without the parent's prior consent, express or implied, except for first aid or emergency care which is reasonably necessary to save life or limb. Beyond these considerations, if the physician conforms to the standards of good medical practice in his community, there is no reason why medical supervision of an athletic team risks legal liability any more than in any other area of medical practice.

**ORIGINAL
SCIENTIFIC
ARTICLE**

XO/XY Mosaicism In A Profoundly Retarded Male

**By Zwi H. Hart, M.D.
Cyrus W. Stimson, M.D.
Plymouth State Home and
Training School
Northville, Michigan
William F. Simpson, M.S.
Anthony Nolke, M.D.
Children's Hospital
Detroit, Michigan**

During a cytogenetic survey of retarded patients with congenital heart disease, we encountered the following case:

A boy, now 15 years old, was born when his mother was 29 and father 37 years of age. The first three months of pregnancy were characterized by uterine bleeding requiring bed rest and stilbestrol. Delivery occured at term and was described as normal; the patient weighed 2.3 kg at birth. He sat at 13 months, walked at 20 months but has never talked. There were five living siblings who were normal; there was one miscarriage, and one sibling died a few hours following a complicated labor and delivery.

The patient at age 15 measured 132.5 cm and weighed 31 kg (both values are under the third percentile); the span was 142 cm and the head circumference was 51.3 cm (Figure 1). The extremities were unusually long and the left ear was larger than the right; there was a pes planus deformity of both feet. There was a kyphoscoliosis of the spine with convexity to the right in the dorsal region and to the left in the lumbar region. X-rays showed no defect of vertebral bodies or disc spaces.

There was a grade 4 systolic murmur heard along the left sternal border with transmission to the interscapular space and a split pulmonic second sound. X-ray revealed an enlarged heart with increased bronchovascular marking and EKG showed complete right bundle block. The clinical impression was an intra-atrial septal defect.

The external genitalia were grossly normal including signs of early puberty. The penis measured 9 cm in length and 8 cm in circumference. Both testicles were descended; the right measured 4 X 3 cm and the left 3½ X 2½ cm. A small prostrate was palpable on rectal examination. Biopsy of the right testis indicated the seminiferous tubules had a normal configuration but were completely devoid of spermatogonia; there was irregular focal hyaline thickening of the basement membranes and some frankly sclerotic tubules. Sertoli and Leydig cells were normal (Figure 2).

Routine laboratory tests including blood count, urinalysis, intravenous pyelogram and x-ray survey for bone age were within normal limits. Buccal smear was chromatin negative.

Cytogenetic studies were done by established methods on blood leukocytes, skin fibroblasts and bone marrow. The results are summarized in Table I and interpreted as indicating XO/XY mosaicism with a remarkable preponderance of XO cells (Figure 3). Both parents have normal complements of 46 chromosomes, with sex chromosomes commensurate for their phenotypes.

Dermatoglyphic studies indicate that the patient has an unusually high digital ridge count (157) as compared to his mother (80) and father (117). The right palmar triradius is elevated to the "t" position with an atd angle of 75°. These findings are in keeping with those seen in the XO constitution.

DISCUSSION

Chromosome mosaicism has been reviewed by

Co-authors

Hart

Stimson

Simpson

This work was made possible by a grant from the Women's Auxiliary to the Maimonides Medical Society, Detroit, the Dr. Max Steiner Medical Research Fund, Detroit, PHS Research Grant No. FR 74, and UPHS Grant No. CA02947.

The authors are grateful to Miss Ruth Kindle and Mr. George Andrews for technical assistance.

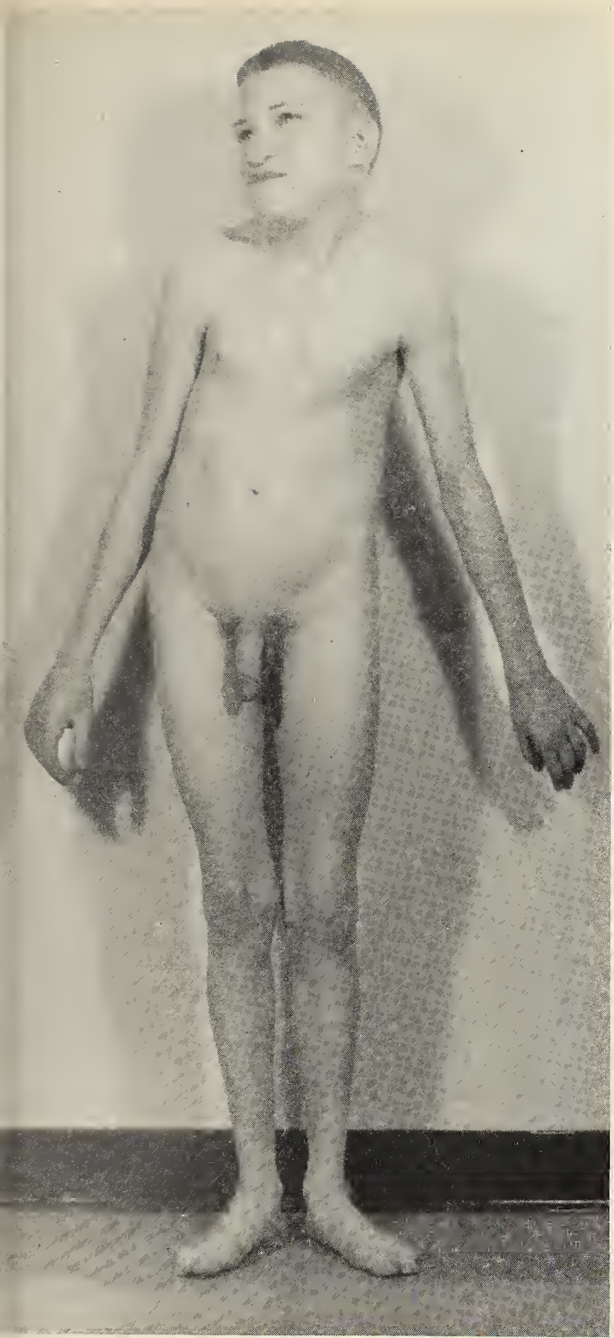


Figure 1. 15-Year-Old phenotypic male with tendency for eunuchoid habitus.

TABLE I
Summary of Results of Cytogenetic Studies

	Number of Chromosomes per Cell					
	44 (4)	45 (4)	46 (5)	46 (4)	47	52
	Number of Cells Karyotyped					
Blood Leukocytes:	5	78	2	0	0	1
Bone Marrow:	0	13	5	2	0	0
Skin Fibroblasts:	0	12	2	2	0	0
Totals:	5	103	9	4*	0	1

Figures in parentheses indicate the number of chromosomes in the G group.

*These four cells had 16 chromosomes in the C group.

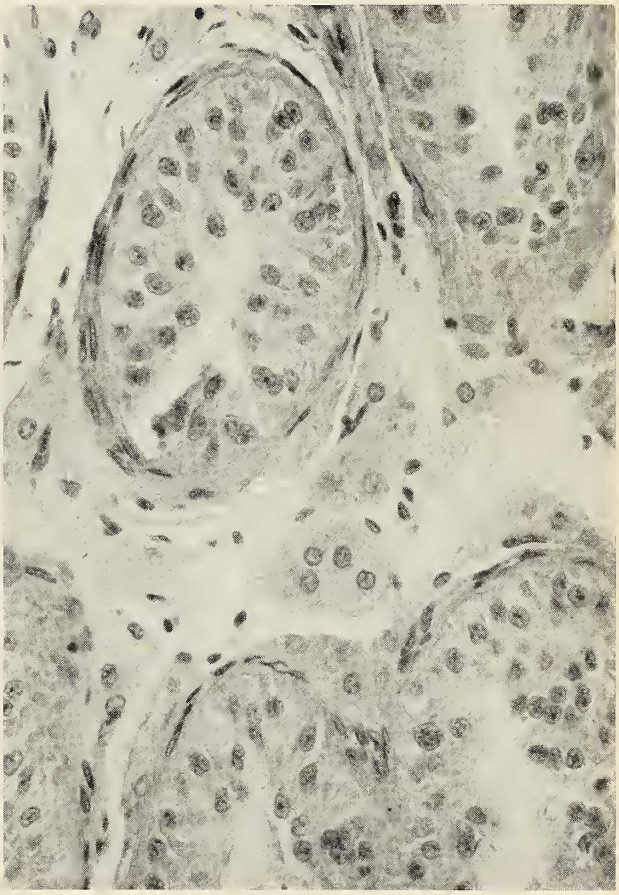


Figure 2. Testicular biopsy showing no spermatogonia or spermatogenesis.

Blank.[21] In XO/XY mosaicism, a Y chromosome is thought to be lost at anaphase in an early mitotic division, giving rise to an XO clone which persists along with the XY clone of the zygote. This type of mosaicism is not rare and can produce a variety of phenotypes. Table II summarizes the literature regarding some of the findings of persons with XO/XY mosaicism. The gross appearance of the external genitalia ranges from underdeveloped female to normal appearing male. All reports of biopsies, including ours, of descended testicles are abnormal, with absence of spermatogenesis and thickening of the basement membranes of the seminiferous tubules.

Mental retardation, although not a constant finding in patients with XO/XY mosaicism, has been reported in three other cases.[2,11,18] Congenital heart defect is not uncommon in persons with XO constitution,[19] but to our knowledge it has not been reported, heretofore, in patients with XO/XY mosaicism.

SUMMARY

A 15-year-old mentally retarded male with congenital heart defect, seminiferous tubule abnormality and scoliosis of the spine was found to have only 45 chromosomes in a remarkably large number of somatic metaphase cells. Almost 10 per cent of the cells studied did have 46 chromosomes with a normal male karyotype and the most likely diagnosis is that of XO/XY mosaicism.

REFERENCES

1. Penrose, L. S.: Finger-prints, palms and chromosomes. Nature 197:933-938, 1963.
2. Willemse, C. H., Van Brink, J. M., and Los, P. L.: XY/XO mosaicism. Lancet 1:488-489, 1962.
3. Robinson, A., Priest, R. E., and Bigler, P. C.: Male pseudohermaphrodite with XY/XO mosaicism and bilateral gonadoblastomas. Lancet 1:111-112, 1964.
4. Jacobs, P. A., Harnden, D. G., Buckton, K. E., Court Brown, W. M., King, M. J., McBride, J. A., MacGregor, T. N., Maclean, N., Fotheringham, A., and Isdale, M.: Cytogenetic studies in primary amenorrhea. Lancet 1:1183-1188, 1961.
5. Judge, D. L. C., Thompson, J. S., Wilson, D. R., and Thompson, M. W.: XY/XO mosaicism. Lancet 2:407-408, 1962.
6. Dewhurst, C. J.: XY/XO mosaicism. Lancet 2:783, 1962.
7. Hirschhorn, K., Decker, W. H., and Cooper, H. L.: Human intersex with chromosome mosaicism of type XY/XO: Report of a case. New Eng. J. Med. 263:1044-1048, 1960.
8. de la Chapelle, A., and Hortling, H.: XY/XO mosaicism. Lancet 2:783-784, 1962.
9. Ferrier, P., Ferrier, S., Klein, D., and Fernex, C.: XY/XO mosaicism. Lancet 1:54, 1963.
10. Lewis, F. J. W., Mitchell, J. P., and Foss, G. L.: XY/XO mosaicism. Lancet 1:221-222, 1963.
11. Ross, G. T., Holland, J. M., Kiser, W. S., and Douglas, G. W.: XO/XY mosaicism and extragenital stigmata of Turner's syndrome in a phenotypic male. J. Clin. Endocr. 25:141-145, 1964.
12. Lambert, A., and Netter, A.: Pseudo-hermaphrodisme

TABLE II
Review of Literature—Summary of the Findings in Genitalia

	External Genitalia	Gonads
Gonadal Dysgenesis		
Jacob[4] 2 cases	Underdeveloped female.	Streak.
Judge[5]	Female.	Right: streak.
Hermaphrodite?[6]	Phallus. Vagina.	Right: tubular structures. Two ovarian follicles.
Hirschhorn[7]	Large labia.	
Male Phenotype		
LaChapelle 42 years[8]	Penis. Hypospadias. Right undescended testis.	Left: seminiferous tubules. Thickened basement membranes. No spermatogenesis. Leydig cells.
Ferrier 35 years[9]	Penis. Undescended right testis.	Left: seminiferous tubules. Thickened basement membranes. No spermatogenesis Leydig cells.
Lewis 45 years[10]	Hypospadias. Bifid scrotum.	Left: malignant seminoma. Right: streak. Adenocarcinoma of uterus.
Ross 16 years[11]	Penis. Hypospadias. Right undescended testis.	Both: seminiferous tubules. No spermatogonia. Thickened basement membranes, left testis. Leydig cells.
Present report 15 years	Normal male.	Right: seminiferous tubules. No spermatogonia. Thickened basement membranes. Leydig cells.
Male Pseudohermaphrodite		
Willemse[2]	Enlarged clitoris.	Right: tubules. Leydig cells. Left: seminiferous tubules. No spermatogenesis. Leydig cells.
Lambert[12]	Enlarged clitoris.	Left: sclerotic tubules. Leydig cells. Right: seminiferous tubules. Degenerated spermatogonia. Leydig cells.
Ferrier[13]	Phallus. Bifid empty scrotum.	Both: semniferous tubules. Spermatogonia. Leydig cells.
Klevit[14]	Phallus. Large labia.	Both: seminiferous tubules. Leydig cells.
Mellman[16]	Enlarged clitoris. Urogenital sinus.	Both: seminiferous tubules. Gonocytes. Right: necrotic tubules.
Turner[16] Case I	Phallus. Vagina.	Seminiferous tubules. Thickened basement membranes. Leydig cells. Other gonad: streak.
Case II	Phallus. Rudimentary vagina. Large labia.	Left: rare Leydig cells. Right: seminiferous tubules. Leydig cells.
Bargada[17]	Ambiguous.	Left: testis. Right: streak.
Robinson[3]	Enlarged clitoris. Vagina. Large labia.	Both: seminiferous tubules. No spermatogenesis. Leydig cells. Gonadoblastoma.

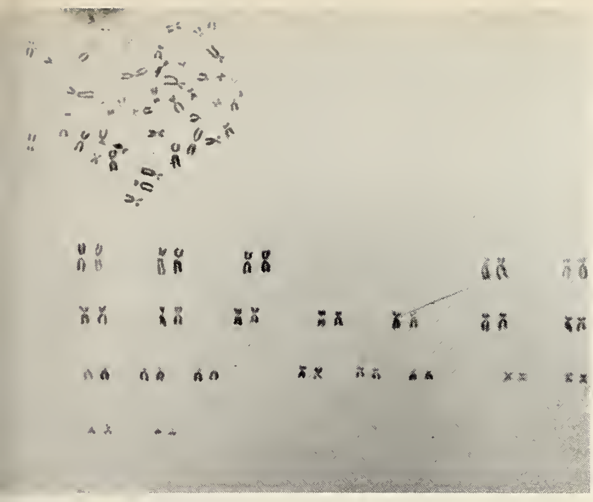


Figure 3a. Cell with 45 chromosomes; karyotype dicates XO complement.

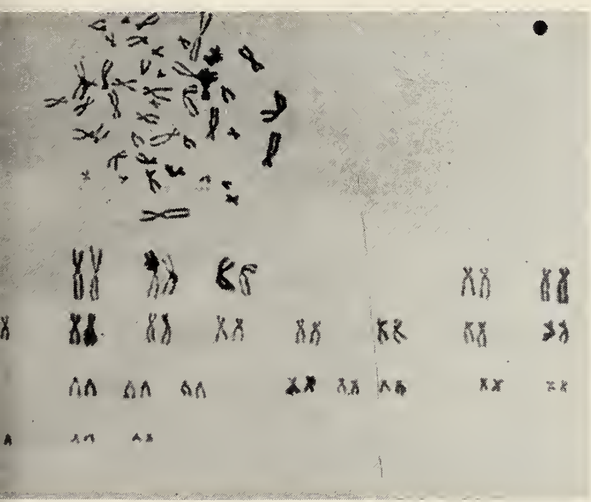


Figure 3b. Cell with 46 chromosomes; karyotype dicates XY complement.

male. "Turnerien" Sem. Hop. Paris 28:1699-1705, 1962.

3. Ferrier, P., Gartler, S. M., Waxman, S. H., and Shepard, II, T. H.: Abnormal sexual development associated with sex chromosome mosaicism. Pediatrics 29:703-713, 1962.

4. Klevit, H. D.: Sex chromosomes in abnormalities of sexual differentiation. Amer. J. Med. Sci. 243:790-807, 1962.

5. Mellman, W. J., Klevit, H. D., Yakovoc, W. C., Moorhead, P. S., and Saksela, E.: XO/XY chromosome mosaicism. J. Clin. Endocr. 23:1090-1095, 1963.

6. Turner, H. H., Greenblatt, R. B., and Dominguez, H.: Syndrome of gonadal dysgenesis and abdominal testis with an XO/XY chromosome mosaicism. J. Clin. Endocr. 23:709-716, 1963.

7. Bergada, C., Cleveland, W. W., Jones, Jr., H. W., and Wilkins, L.: Gonadal histology in patients with male pseudohermaphroditism and atypical gonadal dysgenesis: Relation to theories of sex differentiation. Acta Endocr. 40:493-520, 1962.

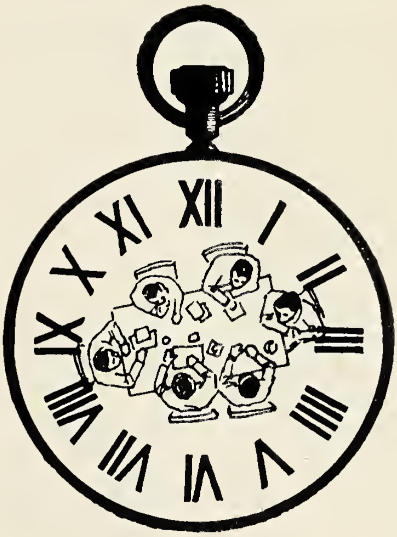
18. Blank, C. E., Bishop, A., and Caley, J. P.: Example of XY/XO mosaicism. Lancet 2:1450, 1960.

19. Lemli, L., and Smith, D. W.: XO syndrome: a study of the differentiated phenotype in 25 patients. J. Pediat. 63:577-588, 1963.

20. Bloise, W., Bottura, C., deAssis, L. M., and Ferrari, I.: Gonadal dysgenesis (Turner's syndrome) with male phenotype and XO chromosome constitution. Lancet 2:1059-1060, 1960.

21. Blank, C. E.: Some aspects of chromosome mosaicism in clinical medicine. Lancet 2:903-906, 1964.

Drivers under 25 years of age represent only about 18 per cent of all licensed drivers in the U. S., but in 1965 they were involved in more than 30 per cent of all fatal traffic accidents and 28 per cent of all nonfatal highway mishaps.



Postgraduate medical education must be a continuing process—every hour around the clock and every day of the week.

The major postgraduate medical experience offered each year by the Michigan State Medical Society is its annual fall Scientific Session. The 1966 program will be offered in Grand Rapids September 27-28-29-30. Every physician is urged today to block out his calendar so he will be able to hear national medical authorities helping him to practice better in his home community.

KNOW COMMON POISONOUS PLANTS?

Every year about 12,000 children eat potentially poisonous plants, most of them of common garden variety, found in any neighborhood, reports the U.S. Public Health Service.

While most of the plants would have to be eaten in large quantity to be fatal, only a small portion of some of the more dangerous flowers, herbs, and shrubs can cause serious symptoms.

There are more than 700 species of plants that can cause death or illness. The complete list is long and varied and so are the complications they produce.

The following list, compiled by the National Safety Council, contains some of the more common varieties of plants, trees, and shrubs which are dangerous if ingested.

(Chart reprinted with permission of National Safety Council from *Family Safety*. Art work reprinted with permission from *Parke-Davis Review*.)

HOUSE PLANTS

PLANT	TOXIC PART	SYMPTOMS
Hyacinth Narcissus, Daffodil	Bulbs	Nausea, vomiting, diarrhea. May be fatal.
Oleander	Leaves, Branches	Extremely poisonous. Affects the heart, produces severe digestive upset and has caused death.
Poinsettia	Leaves	Fatal. One leaf can kill a child.
Dieffenbachia (Dumb cane) Elephant ear	All parts	Intense burning and irritation of the mouth and tongue. Death can occur if base of the tongue swells enough to block the air passage of the throat.
Rosary pea, Castor bean	Seeds	Fatal. A single rosary pea seed has caused death. One or two castor bean seeds are near the lethal dose for adults.
Mistletoe	Berries	Fatal. Both children and adults have died from eating the berries.

FLOWER GARDEN PLANTS

PLANT	TOXIC PART	SYMPTOMS
Larkspur	Young plant, Seeds	Digestive upset, nervous excitement, depression. May be fatal.
Monkshood	Fleshy roots	Digestive upset and nervous excitement.
Autumn crocus, Star-of-Bethlehem	Bulbs	Vomiting and nervous excitement.
Lilly-of-the-valley	Leaves, Flowers	Irregular heart beat and pulse, usually accompanied by digestive upset and mental confusion.
Iris	Under-ground stems	Severe, but not usually serious, digestive upset.
Foxglove	Leaves	One of the sources of the drug digitalis, used to stimulate the heart. In large amounts, the active principles cause dangerously irregular heartbeat and pulse, usually digestive upset and mental confusion. May be fatal.

PLANT	TOXIC PART	SYMPTOMS
Bleeding heart (Dutchman's breeches)	Foliage, Roots	May be poisonous in large amounts. Has proved fatal to cattle.

VEGETABLE GARDEN PLANTS

Rhubarb	Leaf blade	Fatal. Large amounts of raw or cooked leaves can cause convulsions, coma, followed rapidly by death.

ORNAMENTAL PLANTS

Daphne	Berries	Fatal. A few berries can kill a child.
Wisteria	Seeds, Pods	Mild to severe digestive upset. Many children are poisoned by this plant.
Golden chain	Bean-like capsules in which the seeds are suspended	Severe poisoning. Excitement, staggering, convulsions and coma. May be fatal.
Laurels Rhododendron Azaleas	All parts	Fatal. Produces nausea and vomiting, depression, difficult breathing, prostration and coma.
Jessamine	Berries	Fatal. Digestive disturbance and nervous symptoms.
Lantana camara (Red sage)	Green berries	Fatal. Affects lungs, kidneys, heart and nervous system. Grows in the southern U. S. and in moderate climates.
Yew	Berries, Foliage	Fatal. Foliage more toxic than berries. Death is usually sudden without warning symptoms.

TREES AND SHRUBS

PLANT	TOXIC PART	SYMPTOMS
Wild and cultivated cherries	Twigs, Foliage	Fatal. Contains a compound that releases cyanide when eaten. Gasping, excitement, and prostration are common symptoms that often appear within minutes.
Oaks	Foliage, Acorns	Affects kidneys gradually. Symptoms appear only after several days or weeks. Takes a large amount for poisoning. Children should not be allowed to chew on acorns.
Elderberry	Shoots, Leaves, Bark	Children have been poisoned by using pieces of the pithy stems for blowguns. Nausea and digestive upset.
Black locust	Bark, Sprouts, Foliage	Children have suffered nausea, weakness and depression after chewing the bark and seeds.

PLANTS IN WOODED AREAS

Jack-in-the-pulpit	All parts, especially roots	Like dumb cane, contains small needle-like crystals of calcium oxalate that cause intense irritation and burning of the mouth and tongue.
Moonseed	Berries	Blue, purple color, resembling wild grapes. Contains a single seed. (True wild grapes contain several small seeds.) May be fatal.
Mayapple	Apple, Foliage, Roots	Contains at least 16 active toxic principles, primarily in the roots. Children often eat the apple with no ill effects, but several apples may cause diarrhea.

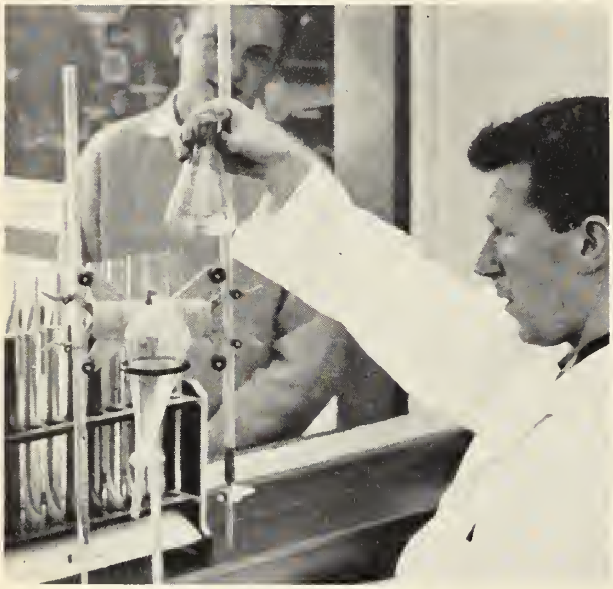
PLANTS IN SWAMP OR MOIST AREAS

Water hemlock	All parts	Fatal. Violent and painful convulsions. A number of people have died from hemlock.

PLANTS IN FIELDS

Buttercups	All parts	Irritant juices may severely injure the digestive system.
Nightshade	All parts, especially the unripe berry	Fatal. Intense digestive disturbances and nervous symptoms.
Poison hemlock	All parts	Fatal. Resembles a large wild carrot. Used in ancient Greece to kill condemned prisoners.
Jimson weed (Thorn apple)	All parts	Abnormal thirst, distorted sight, delirium, incoherence and coma. Common cause of poisoning. Has proved fatal.

Water Through The Ages



"Better Water for Americans" is not a matter of where you dip your bucket. Elaborate treatment facilities with laboratory control are now required to assure the safety and palatability of your public water supply.

What has been the single most important factor in the development of mankind?

Water!

Without it a person would die within a few days. Throughout history it has been one of man's most valuable resources.

The first civilizations developed in the river valleys of the Nile, the Tigris and the Ganges. These rivers provided early man with drinking water and irrigation for the crops he grew. Where man squandered his water civilization failed.

Excavations have uncovered one aqueduct built in the Nile Valley as early as 2000 B.C. Traces of ancient wells, reservoirs and aqueducts have also been discovered in such diverse places as China and Central America. But none of these systems could compare in efficiency to the modern delivery systems that carry billions of gallons of water to today's Americans. According to the American Water Works Association, water utilities in the U.S. supply water to the public at the rate of 150 gallons per person each day.

In addition to its practical uses, water has also figured in the beliefs of many peoples. Before storage and transmission of water, man relied directly on the rains for his water supply, and out of this dependency grew many rituals and superstitions that still survive, such as the forked branch of hazel, called a divining rod.

The ancient Hebrews believed that rain was a blessing from heaven in return for their obedience to the law. Drought, they thought, was the result of their having sinned in some way.

To the Greeks and Romans, Zeus (or Jupiter) was also considered the god of rain. The Greek rainmakers dipped a branch of the oak (Zeus' sacred tree) into water. The Romans cast little images into the Tiber River.

The Druids went in processions to sacred wells or springs where they beat upon the surface of the water, poured water over special stones or tossed it into the air. In Christian times these rites were taken over by the Church, and the processions were led by a priest and the image of a saint. But in later times, the practice was denounced and forbidden.

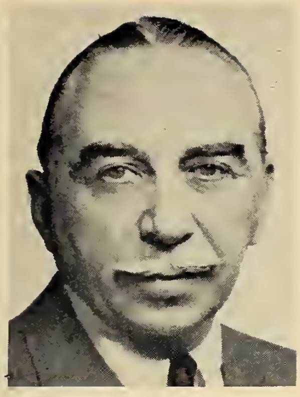
Thanks to modern techniques for processing and storing water, modern Americans don't have to rely on amulets and incantations to assure an adequate supply for their needs. According to the American Water Works Association, the real problem isn't a shortage of water, but lack of planning and building of facilities on the part of many communities.

Whether you ever realized it or not, the United States is presently using less than 25 per cent of the fresh water that is economically available—so there is more than enough water to meet all our future demands.

As the U.S. has grown, so have its water utilities multiplied and improved. America's first piped water supply was built in Boston in 1652. Between 1652 and 1800, only nine water works were known in this country compared to 20,000 in existence today.

Today water is even more vital to the welfare of American communities than ever before. Safe public drinking water, for example, has helped to eliminate water-borne diseases like cholera and typhoid. Every town—large or small—can now have its swimming pool. An adequate water supply helps stimulate community growth, because most types of industry require large quantities of water for air-conditioning systems, if not for processing. When industries look for new locations, communities which cannot show that they have plans to meet future water demands will be by-passed.

As a commodity, water can be costly. For example, in the Sahara, a rich merchant once paid a came driver $20,000 for his gourd of water. But, delivered to your tap, 60 gallons of delicious fresh water actually cost you less than a bottle of pop!



Wm. A. Hyland, M.D.

ribute Paid o 'Bill' Hyland or Leadership

Friends, business associates, com- unity leaders and fellow physi- ans paid tribute to William A. Hy- nd, M.D., in Grand Rapids, July at St. Andrews Cathedral where e funeral services were conducted.

Dr. Hyland, who died July 18 ter suffering a heart attack in ay, had compiled an outstanding cord of service to medicine, busi- ss, education and community rvice.

In his home community of Grand apids where he was born April 26, 392, and had practiced since 1915, r. Hyland was beloved as the hampion of the neophyte physi- an." He provided personal advice d financial aid for many physi- ans as they started their careers. ysicians, nurses, aides, technicians ike considered him a highly-re- ected friend, consultant and sur- on.

Dr. Hyland served as MSMS esident in 1946-1947, and was ected in 1952 by The Council to e position of treasurer, a post he ld for 14 years. As treasurer, his ise business judgment assisted SMS in financing its headquart- s building.

Keenly interested in organiza- nal medicine, Dr. Hyland served th distinction as a MSMS dele- te to the AMA since 1953. He led many important AMA assignments—including chairmanship of the AMA Communications Committee in 1961 and chairmanship of the AMA Constitution and By-Laws Committee in 1965.

Past President of the Kent County Medical Society in 1930, Dr. Hyland was a member of the President's Advisory Board (Regents) of Georgetown University, a charter member of Blue Shield in 1941, and Michigan chairman of the U. S. Committee of World Medical Association in 1964.

Long a leader in cancer control activities, Dr. Hyland was a former member of the American Cancer Society board and in 1953 received its coveted Tiffany Award.

(Note: A complete article about the contributions of Dr. Hyland will appear in the September issue of "Michigan Medicine.")

Supports MSU Request

Support for the Michigan State University proposal for a full medical school was given by the Michigan State Medical Society Council at its July meeting.

"The physicians of Michigan endorse the MSU plans because we are vitally concerned about obtaining more doctors of medicine to serve the people of the state," explained Harold H. Hiscock, M.D., of Flint, Council Chairman.

"The medical society urges favorable action on the MSU request by the Michigan State Board of Education and its Citizens Committee on Health Care Legislation," Dr. Hiscock added.

The MSU Board of Trustees announced July 13 that it had filed a request with the State Board of Education to expand its new two-year pre-clinical medical school to a full-degree program. MSU will accept its first class of 25 medical school students this fall.

"MSU is well equipped already for the third medical school in Michigan," explained Dr. Hiscock. He pointed out that MSU already has a school of Nursing, a College of Veterinary Medicine, and strong programs in such related fields as biology, speech and hearing, clinical psychology, medical technology and social work. MSU is better able to produce doctors quicker than any other Michigan institution of higher education, stressed Dr. Hiscock.

The efforts of MSU to train physicians have had the on-going encouragement of the medical society. A resolution endorsing the early MSU plans was adopted by the House of Delegates in 1963. The new MSU Dean of Medicine, Andrew D. Hunt, Jr., M.D., is an active member of several medical society committees.

McGillicuddy New MSMS Secretary

Oliver B. McGillicuddy, M.D., Lansing, is the new secretary of the Michigan State Medical Society, elected by The Council at its July meeting.

Dr. McGillicuddy fills the vacancy created when D. B. Wiley, M.D., of Utica, resigned and left his private practice to accept a position with the State Department of Public Health.

Dr. McGillicuddy was president of the state medical society in 1964 and 1965. He has been a member of The Council for 13 years and served as chairman for two years.

Annual Session Lists Diet-Therapy Event

The Fourth Conference on Diet-Therapy in Michigan will be co-sponsored by MSMS and Michigan Department of Public Health in co-operation with the medical schools during the MSMS Annual Session in Grand Rapids, September 27-30.

The Program Planning Committee includes: J. K. Altland, M.D.; K. H. Johnson, M.D.; Warren Tryloff, all representing MSMS; and J. L. Isbister, M.D., Alice H. Smith, M.S., both representing MDPH.

Jonathan O. Cole, M.D., National Institute of Mental Health, Bethesda, Md., will speak 11:40 a.m., Thursday, September 29, on "The Use and Abuse of Tranquilizers."

Jonathan O. Cole, M.D.

Rev. Paul B. McCleave, LL.D., director, Department of Medicine and Religion, AMA, Chicago, will speak at 2:40 p.m., September 28, on "The Dignity of Death."

Rev. Paul B. McCleave

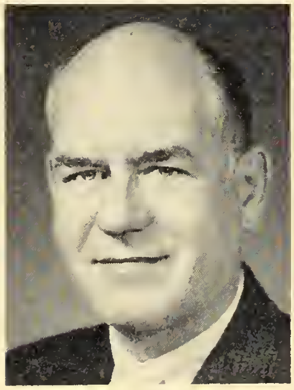
Rev. Gerald B. O'Grady, Jr., minister of Bloomfield Hills, will be on a panel presentation at 4:00 p.m., Wednesday, September 28, on "The Doctor's Dilemma in a World of Changing Morals."

Rev. G. B. O'Grady, Jr.

William L. Proudfit, M.D. Cleveland Clinic Foundation Cleveland, Ohio, will speal at 11:20 a.m., Wednesday September 28 on "The Medical and Operative Management of Coronary Heart Disease."

W. L. Proudfit, M.D.

MORE THAN 100 SPEAKERS ON PROGRAM FOR 101ST ANNUAL SESSION IN GRAND RAPIDS



Russell B. Roth, M.D.

Russell B. Roth, M.D., Erie, Pa., will be on a panel presentation at 4:00 p.m., Thursday, September 29, on "The Government in Medicine — 1966," an interpretation of federal and state legislation in the provision of health services.

J. R. Willson, M.D.

J. Robert Willson, M.D., chairman and professor, department of obstetrics and gynecology, University of Michigan Medical School, will be a panel partcipant on "The Doctor's Dilemma in a World of Changing Morals," at 4 p.m., Wednesday, September 28.

101ST ANNUAL SESSION SEPT. 27-28-29-30

–Round Table Discussions

–Hospital Clinics

–General Assembly Lectures

–Panel Presentations

–22 Sections

–Meetings of Specialty and Alumni Groups

–Woman's Auxiliary Program

–Medical Assistants Program

–125 Exhibits

–Physicians' Art and Photo Show

–MD Screening Examinations

–Annual State Society Dinner Dance

Vho Will Get I/D Awards?

Who will be the recipients of the ›veted MSMS awards at the 1966 nnual Session in Grand Rapids?

The MSMS House of Delegates ı Tuesday morning, September 27, ill present the "Outstanding Mich- an Physician Award" and several Certificates of Commendation."

The Outstanding Physician Award as new last year and was voted to ranklin Troost, M.D., of Holt, for s outstanding service to the med- al profession and his home com- unity.

The entry list for the 1966 Cer- ficates of Commendation was the ngest in the history of this award. ompetition was close, according to ıe chairman, Arnold L. Brown, I.D., Oakland County.

The Committee in its report Sun- ıy, September 25, at Grand Rap- s, will recommend several phys- ian for Commendations.

Following is a list of the previous cipients:

1962

Jerome W. Conn, M.D., Ann Ar- ›r; G. D. Cummings, M.D., Lan- ıg; Charles S. Kennedy, M.D., etroit; and Robert L. Novy, M.D., etroit.

1963

Forest D. Dodrill, M.D., Bloom- ıld Hills; *Charles J. Jentgen, I.D., Ann Arbor; John M. Shel- n, M.D., Detroit, and Homer H. ryker, M.D., Kalamazoo.

1964

Goldie B. Corneliuson, M.D., Lan- ıg; John S. DeTar, M.D., Milan; ›bert M. Heavenrich, M.D., Sag- aw; Norman F. Miller, M.D., Ann bor; E. Gifford Upjohn, M.D., alamazoo; and Orus R. Yoder, .D., Ypsilanti.

1965

Fred J. Hodges, M.D., Ann Ar- r; Traian Leucutia, M.D., De- ›it; and Remus J. Robinson, .D., Detroit.

---

ied in 1964

Have You Joined?

Have you joined MDPAC-AMPAC?

Be a dues-paying 1966 member. That's the invitation issued by the MDPAC Board Members.

For full information ask your county society president or write to MDPAC, Box 169, East Lansing.

Proud Moment

A husband and wife were graduated this year from the Wayne State University School of Medicine, and both are interning in Detroit.

Linda Jo Logsdon and O. Keith Lepard met in a freshman anatomy class at the WSU School of Medicine and were married in September, 1963. They continued in school, and now Keith is interning at Sinai and Linda at Grace.

New MSMS Neighbors

The Michigan Automobile Dealers Association has broken ground for a 15,000 - square - foot headquarters near the MSMS building. The Association building will be north of the Michign Education Association on M-78 (Saginaw Street) just east of MSMS.

Doctor-Wife Art Show Adds Photography

The Doctor-Wife Art Exhibit at the 1966 Michigan State Medical Society Annual Session in Grand Rapids in September will have the added attraction of a photography exhibit this year.

All photographs entered must be at least 8 by 12 inches in size, matted or framed.

The 1966 categories are:

I Painting: Oil, polymer, encaustic, lacquer, etc.
II Painting: Watercolor, casein, tempera, gouache.
III Sculpture: Wood, stone, ceramic, metal.
IV Ceramics
V Drawing and graphic art, all print techniques.
VI Three dimensional design: weaving, stitching; Jewelry-making.
VII Photography.

The entries will be received in the exhibit area in the Civic Auditorium on Monday, September 26, from 8:30 a.m. to 5 p.m. and Tuesday morning until 11 a.m. All entries must remain in place until 5 pm. on Thursday, September 29.

Mrs. F. A. Hutchinson is the chairman.

ART EXHIBIT ENTRY BLANK

The following entry blank may be used for pre-registration to assist the committee in planning the set-up of the show. Each entrant is allowed four entries in the entire exhibit.

Mail to: Mrs. F. A. Hutchinson
2518 Elmwood, S.E.
Grand Rapids, Michigan

I will have these entries in the Doctor-Wife Art Exhibit in the following categories:

.... No. of Entries ....
.... No. of Entries ....
.... No. of Entries ....
.... No. of Entries ....

Name: ....

Address: ....

N. L. Lindquist New President Of U.P. Group

Norman L. Lindquist, M.D., of Escanaba, was elected the new president of the Upper Peninsula Medical Society at the 73rd annual meeting at Iron Mountain.

Dr. Lindquist succeeds W. H. Huron, M.D., of Iron Mountain.

Escanaba was awarded the 74th annual meeting to be held next year.

Elected vice-president was William Jones, Sr., M.D., of Menominee.

The three-day convention was concluded with the president's dinner and dance at the Dickinson Hotel. The speaker was James Z. Appel, M.D., of Lancaster, Pa., president of the American Medical Association.

The sessions had as speakers and moderators approximately 15 outstanding men in the national medical profession. In addition to AMA President Appel, there were MSMS President Luther Leader, M.D., Governor Romney, and other dignitaries.

Over 100 members of the Upper Peninsula Medical Society, plus guest speakers and wives of members, attended the convention.

Federal Funds for State Mental Health Top $5.5 Million

Federal grants for Michigan's mental health programs amounted to more than $5.5 million during the fiscal year ending June 30.

Robert A. Kimmich, M.D., director, Michigan Department of Mental Health, adds that "this amount represents only those grants made directly to or through our department, and does not include federal funds provided for mental health projects conducted by our agencies."

The M.D. Screening, which proved popular at the 1965 Annual Session, will be offered again at Grand Rapids September 27-30. Here, A. Carl Stander, M.D., Saginaw, is shown going through the screening procedure last year, with an attendant watching the vitalometer.

Annual Session At G.R. Offers Screening Tests

An M.D. screening booth will be featured at the annual meeting of the Michigan State Medical Society, in Grand Rapids September 27-30.

The booth will be set up in the exhibit area at the Civic Center and will feature chest x-ray, tuberculin skin testing, pulmonary function testing, E.K.G. and blood pressure, blood test for diabetes, and weight check.

The testing is designed to provide only preliminary screening examination, not diagnosis. It is hoped that this service will motivate physicians, who do not routinely do so, to have complete physical examinations.

Sponsors of the booth are: the Michigan Tuberculosis and Respiratory Disease Association and affiliated associations, the Michigan Heart Association, the Michigan Diabetes Association, the Michigan Thoracic Society, and the Michigan Department of Public Health.

Woman Leads '66 WSU Graduates

For the second time in the 98 year history of the Wayne Stat University School of Medicine, th top rank in the graduating class o 72 is occupied by a woman. Thi year's honors go to Evelyn Fisher M.D., daughter of Mrs. Otto O Fisher and the late Dr. Fisher, Detroit industrial surgeon and general practitioner. Evelyn's brother James, is a Grosse Pointe pediatrician.

Evelyn's academic career is punctuated with honors. She is the recipient of the 1966 scholastic awar of the American Medical Women' Association, Inc., and the Arthur H Smith award for excellence in biochemistry. She twice won the WS Medical Alumni Association awar and in her junior year, was electe to Alpha Omega Alpha.

She will intern at Barnes Hospital, St. Louis, Missouri.

Robert Rutzky Award for outstanding performance in patholog and the Dorothy Edyth Penfil Memorial Award to Frederick J. Grose M.D., Farmington.

Student Council Distinguishe Service Award to Robert C. Buza M.D., Detroit.

Anna Albert Keller Memoria Award for outstanding research t Robert Niccolini, M.D., Detroit and Ralph S. Ryback, M.D., Detroit.

Anna Rutzky Award in pediatric to Charles Smethells, M.D., Warren

Gordon B. Myers Memoria Award in internal medicine to Alle Oboler, M.D., Detroit.

Friedlaender Award in microbiology to Bruce Nolan, M.D., Detroit

Dr. A. Ashley Rousuck Award i internal medicine to Lawrence R Crane, M.D., Detroit.

William H. Honor Memoria award for outstanding performanc in courses offered in surgical subspecialties to James U. Collin M.D., Grosse Pointe Park, and Theodore H. Rights, M.D., Detroit.

Joseph Witter, M.D., Detroit, had unique way of traveling to the MA Convention in Chicago to rve as an Alternate MSMS Dele-ate. He piloted his own Beechcraft onanza into Meigs Airport along ie Chicago shoreline.

Since 1940, Dr. Witter has been ying. During World War II he was glider co-pilot, seeing service in e 101st Airborne Division invasion Holland. Currently, he holds a mmercial license covering single d multi-engine planes and sea-anes.

His small Beechcraft has taken him Alaska, the Virgin Islands, to ovia Scotia, and to Latin America. ext year, he plans to fly through uth America.

Mrs. Witter, an enthusiastic flyer, companies her husband as often she can.

* * *

Charles L. Hudson, M.D., pres-dent of the American Medical ssociation, was awarded an Hon-rary Doctor of Laws Degree in ommencement ceremonies at lma College. Dr. Hudson was nly 15 years old when he at-ended his first classes at Alma in 920. He was graduated with onors four years later and went n to medical school at the Uni-ersity of Michigan.

* * *

Robert F. Baugh, M.D., Detroit, t the States July 1 for a 60-day riod of service with Project Viet m.

* * *

Paul W. Gikas, M.D., chairman the MSMS Committee on High-y Accident Prevention recently re-ved a 1966 Medical Tribune Auto Safety Award for his studies of traffic fatalities in Washtenaw County. Sharing the honors was Donald Huelke, Ph.D., Ann Arbor, who conducted the research with Dr. Gikas.

* * *

A memorial recognition program was held recently at Wayne to pay tribute to Albert R. Parker, M.D., who died last February after 40 years of service in Wayne. A resolution adopted by the Michigan Legislature also honored the physician for his service to his church and the local historical commission.

Personal Mention:

There were several highlights at a recent meeting of the Kent County Medical Society . . . a new MSMS charter was presented by C. Allen Payne, M.D., MSMS President-Elect . . . to Dale Kessler, M.D. Grand Rapids was given a citation from the AMA by AMA Field Representative Jack Brown for his work in Viet Nam . . . and the major address was given by Michigan-Native Edward Annis, M.D., AMA past president from Miami.

* * *

The American Geriatrics Society Convention in Chicago selected three Michigan physicians to the board of directors. They are Brock E. Brush, M.D., Detroit, past president; C. Howard Ross, M.D., Ann Arbor, member of MSMS Geriatrics Committee, and Francis P. Rhoades, M.D., Detroit.

* * *

Conrad R. Lam, M.D., Detroit, has been awarded an Honorary Doctor of Science Degree by Hardin-Simmons University, his undergraduate alma mater.

Harold A. Furlong, M.D., Pontiac, was one of five Michigan Medal of Honor recipients who were honored in Detroit at an Armed Forces Week Concert.

* * *

Homer H. Stryker, M.D., Kalamazoo, addressed the Buchanan Chamber of Commerce banquet, which included many civic leaders as special guests.

* * *

Harry A. Towsley, M.D., associate director of the U-M Department of Postgraduate Medicine and professor of pediatrics, is on a six-month sabbatical. During this time he will consult with other specialists in postgraduate medical education around the States. The U-M program annually draws 2,500 physicians to short courses.

* * *

William C. VanGelder, M.D., Muskegon, will be one of the principal speakers at the 12th annual meeting of the Flying Physicians Association, at Las Vegas, September 11-16. Dr. VanGelder will moderate a symposium on trauma.

Among the members of the Governor Romney Birthday Celebration Committee, which sponsored the July 12 birthday party at Cobo Hall was Sidney E. Chapin, M.D., Dearborn.

* * *

A new citizens' award for outstanding contributions to the control of tuberculosis (The Burt R. Shurly Memorial Award) was given to Frank J. Malje, Detroit physician who spotted 20 TB cases among the children at the Hansel and Gretel Day Nursery in Garden City last December. The award was made at the annual meeting of the TB and Health Society in Detroit.

* * *

John Valentiejus, M.D., New Buffalo, received the "Citizen of the Year Award" recently for his services there. About $1,000, raised at the community dinner, were put into a scholarship fund to send a worthy boy to medical school.

In Diverticulitis...

Increased pressure from straining aggravates diverticulitis

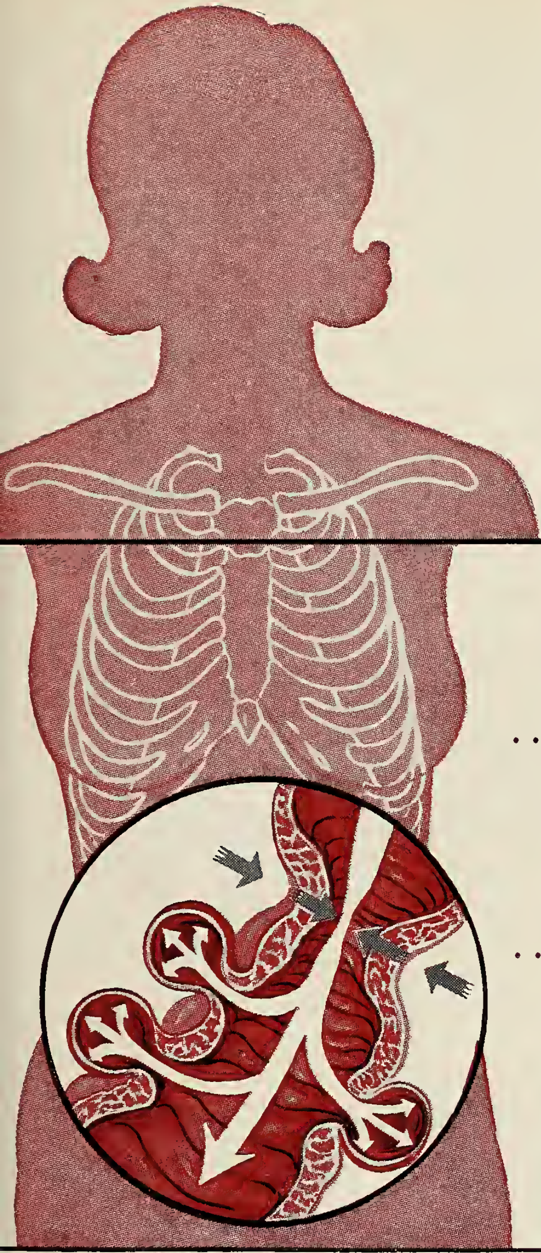
METAMUCIL®

brand of psyllium hydrophilic mucilloid

Metamucil Powder: 4, 8 and 16-ounce containers.

Instant Mix Metamucil: cartons of 16 and 30 single-dose packets.

Say you saw it in Michigan Medicine



Metamucil

. . . to counteract the constipation which is etiologically important and

. . . to protect the mucosal surface against physical irritants.

Average Adult Dosage:

One rounded teaspoonful of Metamucil (or one packet of Instant Mix Metamucil) in a glass of cool liquid one to three times daily.

SEARLE

Research in the Service of Medicine

SO
Light
& Clear
ELDOQUIN™ CREAM
(2% hydroquinone)

To lighten and clear blemished skin—without overbleaching or reactivity

Freckling, pigmented blemishes and skin discolorations gently fade away with Eldoquin. This exclusive new cream goes directly to the source of common skin blemishes. Applied one or two times daily, Eldoquin gradually lightens these areas to blend uniformly with the surrounding skin.

Eldoquin is mild: 2% Hydroquinone proved to be a remarkably safe bleaching agent during use tests on 380 patients ". . . no case of sensitization developed (in these tests)."[1]

Overbleaching is never a problem. Due to the transient action of Eldoquin, bleaching is gradual. Treatment can be easily adjusted to maintain a blemish-free complexion with uniform skin tone.

Contraindications: Do not apply to skin which is affected by prickly heat, sunburn, depilatory application, or is otherwise irritated. Do not use near eyes or open cuts.

Precautions: Before initiating treatment, sensitivity tests should be made, as follows: Apply cream to an area about the size of a quarter on inside of upper arm and rub in well. Allow to remain for 24 hours. If no redness or itching develops, proceed with the treatment. Do not expose treated area to sunlight for extended periods.

Supplied: ½ oz. tube.

References: 1. Spencer, Malcolm C. and Becker, S. W., Jr.: **A Hydroquinone Effect,** Clinical Medicine 70:6 (June) 1963. 2. Spencer, Malcolm C: **Hydroquinone Bleaching,** AMA Archives of Dermatology 84:131 (July) 1961.

PAUL B. ELDER COMPANY, Bryan, Ohio

CHANGING WORLD AND PRACTICE OF MEDICINE

By Harry A. Towsley, M.D.
Chairman, 1966 Annual Session
Program Committee

The people of this country are on the threshold of the harvest of health benefits never before conceived. These benefits are the result of exploding biomedical knowledge accruing from the vast sources of money made available from private and federal funds for research, and the massive social and economic changes occurring in our nation.

In this time of unprecedented change in medical knowledge, social concepts and moral values, the problems encountered by physicians dedicated to the precepts of the healing arts, so wisely set forth by Hippocrates some 400 years B.C., have multiplied by leaps and bounds.

The mass of medical literature resulting from this new research has compounded the physician's task of "keeping up with things that are new and useful," to enable him to pass on these benefits to his patients.

The large-scale entrance of government participation in the provision of health services to our citizenry, in this year, has created confusion in the minds of physicians in socio-economic areas. The changing philosophies of moral and ethical standards have further compounded the burdens of the practice of medicine.

With these factors in mind, the Scientific Program Committee has arranged the program for the 101st Annual Session of the Michigan State Medical Society, to be held September 27-30, 1966, at the Pant-nd Hotel in Grand Rapids.

The general format of this year's program provides eight Round-Table discussions with ample time for questions and answers, covering a broad range of subjects of interest to every physician — be he generalist or specialist. Three panel discussions dealing with evaluation of recent scientific advances in organ substitution, our dilemma in a world of changing morals, and interpretation of governmental roles in the provision of health care, will aid the physician in his daily contacts with his patients. Fifteen scheduled lectures by outstanding men of medicine, governmental service and the clergy will bring new concepts to our thinking in this changing world.

Clinical conferences provide one of the most satisfactory learning experiences for the physician. For the first time, such conferences are available to the members of our Society through the efforts of the administration and staff of three Grand Rapids hospitals.

It is the hope of the Program Committee and the officers of your State Society that every medical doctor in our state will take advantage of this opportunity to gain new and useful knowledge offered in this, our 101st Annual Session.

Growth Hormone Problem

By Editor G. H. Lowrey, M.D.
and G. E. Bacon, M.D.
Both of Ann Arbor

A significant contribution in the field of endocrinology was the isolation of human growth hormone (HGH) in 1956. Recent publicity in the lay press has prompted us to comment upon the present availability of HGH for the treatment of short stature.

It is now apparent that a variety of problems limit the clinical usefulness of this agent. The most favorable therapeutic response has thus far been achieved in children with hypopituitarism. Since this group accounts for only about 5 per cent of patients with short stature, a relatively small proportion of affected children can expect to benefit from HGH. Furthermore, the distinction between hypopituitarism and other forms of dwarfism, particularly the "delayed maturation syndrome," may not be readily apparent. Patients in the latter category also present with small size, normal body proportions and retarded skeletal maturation. These children, however, tend to have an extended growth period and many will eventually attain a reasonable adult height without treatment.

Since the diagnosis of hypopituitarism can rarely be made on the basis of target gland deficiencies in the resting state, other means must be employed. The most direct approach is the measurement of serum growth hormone by radioimmunoassay. Unfortunately, this procedure is tedious and is currently being performed in relatively few medical centers, primarily as a research tool. The range of normal values appears to be wide, and very low levels may be found beyond infancy in children of normal height. At the present time, we are unwilling to make a diagnosis of growth

(Continued on Page 652)

when they balk at capsules-
use this tiny tablet

DECLOMYCIN®
DEMETHYLCHLORTETRACYCLINE
FILM COATED TABLETS 150mg

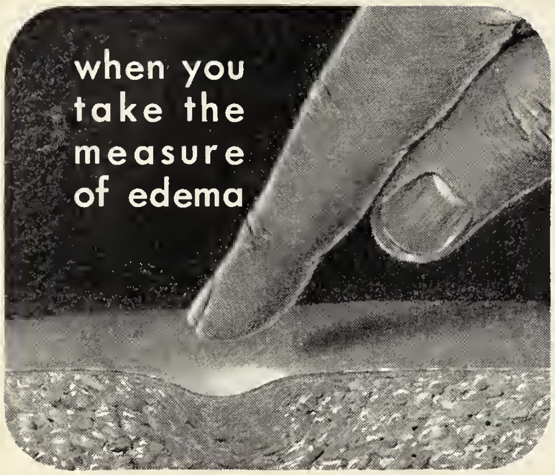
The finicky adult or the elderly patient who "can't" swallow capsules may object to liquid medication as well. DECLOMYCIN 150 mg Tablets are n excellent way around the problem. Smaller than an aspirin and easier to wallow, each new 150 mg film-coated tablet provides a full therapeutic dose with the "extra" benefits of DECLOMYCIN over tetracycline — ower mg intake per day...1-2 days' "extra" activity to protect against elapse or secondary infection...the option of b.i.d. dosage.

ffective in a wide range of everyday infections—respiratory, uri-
ary tract and others—in the young and aged—the acutely or chron-
ally ill—when the offending organisms are tetracycline-sensitive.
ontraindication—History of hypersensitivity to demethylchlor-
tracycline.
arning—In renal impairment, usual doses may lead to excessive
stemic accumulation and liver toxicity. Under such conditions,
wer than usual doses are indicated and, if therapy is prolonged,
rum level determinations may be advisable. A photodynamic
action to natural or artificial sunlight has been observed. Small
nounts of drug and short exposure may produce an exaggerated
nburn reaction which may range from erythema to severe skin
anifestations. In a smaller proportion, photoallergic reactions
ave been reported. Patients should avoid direct exposure to sun-
ght and discontinue drug at the first evidence of discomfort.
recautions and Side Effects—Overgrowth of nonsusceptible organ-
ms may occur. Constant observation is essential. If new infec-
ons appear, appropriate measures should be taken. Use of demethylchlortetracycline during tooth development (last trimester of pregnancy, neonatal period and early childhood) may cause discoloration of the teeth (yellow-grey-brownish). This effect occurs mostly during long-term use but has also been observed in short treatment courses. In infants, increased intracranial pressure with bulging fontanels has been observed. All signs and symptoms have disappeared rapidly upon cessation of treatment. Side reactions include glossitis, stomatitis, proctitis, nausea, diarrhea, vaginitis and dermatitis. If adverse reaction or idiosyncrasy occurs, discontinue medication and institute appropriate therapy. Anaphylactoid reactions have been reported.

Average Adult Daily Dosage: 150 mg q.i.d. or 300 mg b.i.d. Should be given 1 hour before or 2 hours after meals, since absorption is impaired by the concomitant administration of high calcium content drugs, foods and some dairy products.

Capsules: 150 mg; *Tablets:* film coated, 300 mg, 150 mg, and 75 mg of demethylchlortetracycline HCl.

EDERLE LABORATORIES, A Division of American Cyanamid Company, Pearl River, New York Lederle
629-6-2990



. . . introduce your patient to

AQUATAG®

(BENZTHIAZIDE)

AQUATAG (Benzthiazide) is a potent, orally active, nonmercurial, diuretic agent. It is effective orally in producing diuresis in edema states, where it is therapeutically comparable to mercurials given parenterally. AQUATAG (Benzthiazide) is mildly antihypertensive in its own right and enhances the action of other antihypertensive drugs when used in combination.

DIURETIC ACTION: Clinically, the oral administration of AQUATAG (benzthiazide) results in diuretic activity within two hours with maximal natriuretic, chloruretic, and diuretic effects occurring during the fourth, fifth and sixth hours. Maintenance of response continues for approximately 12 to 18 hours. Acidosis is an unlikely complication since therapeutic doses of AQUATAG (benzthiazide) do not appreciably increase bicarbonate excretion. Edematous patients receiving 50 mg. of AQUATAG (benzthiazide) daily for five days developed a maximal increase in the rate of sodium excretion on the first day, and maintained this high rate until depletion of excessive body stores of sodium.

In congestive heart-failure patients, AQUATAG (benzthiazide) produced the same weight loss, during a 48-hour treatment period as did a maximally effective dose of hydrochlorothiazide.

DOSAGE: Diuresis, initially 50 to 200 mg.; maintenance 25 to 150 mg., daily. Hypertension 50 to 100 mg. initially, adjusted to 50 mg. t.i.d. or downward to minimal effective dosage level.

WARNINGS: Use with caution in the presence of renal disease as azotemia may be precipitated or increased. In patients with advanced hepatic disease, electrolyte imbalance may result in hepatic coma. Dosage of coadministered antihypertensive agents should be reduced by at least 50%. In cases of suspected electrolyte imbalance, serum electrolyte determinations should be performed and imbalance, if any, corrected. Stenosis or ulcer of small intestine have been reported with coated potassium formulas, and surgery has been required and deaths have occurred. Based on surveys of both United States and foreign physicians, incidence of these lesions is low and a causal relationship in man has not been definitely established. Until further experience has been obtained, the use of the drug in pregnant patients should be weighed against possible hazards to the fetus.

CONTRAINDICATIONS: AQUATAG (benzthiazide) is contraindicated in progressive renal disease or dysfunction including increasing oliguria and azotemia. Continued administration of this drug is contraindicated in patients who show no response to its diuretic or antihypertensive properties. Severe hepatic disease is a relative contraindication. (See "Warnings" above.)

PRECAUTIONS AND SIDE EFFECTS: Electrolyte imbalance with hypokalemia (digitalis toxicity may be precipitated), hypochloremic alkalosis and hyponatremia may occur.

Patients with cirrhosis should be observed for impending hepatic coma and hypokalemia. Other reactions may include blood dyscrasias, hyperuricemia and gout, nausea, jaundice, anorexia, vomiting, diarrhea, dizziness, paresthesia, photosensitivity and headache. Hepatic tetor, tremor, confusion and drowsiness are signs of impending pre coma and coma in patients with cirrhosis. Insulin requirements may be allered in diabetes. AQUATAG (benzthiazide) should be used with caution post-operatively as hypokalemia is not uncommon. Potassium supplementation may be advisable pre- and post-operatively. There have been occasional reports of thrombocytopenia, leukopenia, agranulocytosis, aplastic anemia and precipitation of acute pancreatitis or jaundice.

Before prescribing or administering, read the package insert or file card available on request.

Available as 25 or 50 mg. scored tablets.

Request clinical samples and literature on your letterhead.

S.J.TUTAG
& COMPANY
Detroit, Michigan 48234

hormone deficiency on the basis of this determinatio alone.

Much diagnostic importance is therefore attached t the metopirone (SU-4885) test in which failure of two-fold increase in the urinary 17-hydroxysteroi excretion after administration of this agent suggest abnormal function of the pituitary-adrenal axis. Thi test will not, of course, detect those cases in which isolated growth hormone deficiency exists, but such situation is probably the exception rather than th rule.

Finally, growth hormone from species other tha primates is ineffective in man. For practical purposes this material must be extracted from human pituitar glands obtained at autopsy with the result that th present supply is insufficient to meet the demands.

The National Pituitary Agency has been establishe in Washington, D. C., in an attempt to provide HGH for those most likely to be helped and in sufficien quantity that meaningful data may be obtained Growth hormone is extracted from pituitary gland sent to this agency by participating hospitals and portion is then allocated to study groups such as th Collaborative Growth Hormone Study in Buffalo, Ne York, where it is re-distributed for clinical research

While there is no doubt that this project will contribute much to medical knowledge, a cumbersom task faces the clinic or private physician making application for a supply of growth hormone for his dwarfe patient. Provided no obvious organic cause for dwarfism is detected and the bone age is sufficiently retarded, hospital admission is usually necessary fo further diagnostic procedures. A very specific protoco must be followed, including detailed family histor and numerous laboratory studies are completed suc as the metopirone test, glucose tolerance test, etc. Al information on the patient is reviewed by the stud group and the patient may then be selected as a tentative candidate for growth hormone therapy. However, before a final decision is reached, a second hospitalization is required for collection of additiona blood and urine specimens which are evaluated in central laboratory operated by the Collaborativ Growth Hormone Study. Even then, unequivoca therapeutic success is not assured since in many case the effect of HGH tends to wane with continued use In some instances this appears to be due to specifi antibody formation.

Hopefully, the present situation will soon be alleviated by the artificial synthesis of HGH or its activ portion. It has been predicted that this will be possible within the next five years. The recent elucidatio of the structure of the growth hormone molecule is a important step in this direction. Meanwhile, candidates for HGH therapy must continue to be chosen i much the same careful and studious manner presentl employed for selection of patients for renal transplan

Any Number Can Play

y Robert E. Rice, M.D.
hairman, MSMS Committee
n Rural Medical Service

Many problems of rural-urban living face this na-ion today. Needs cannot be met if there is no under-tanding of the problem. Only an enlightened public an respond.

Through its national rural health conferences, the MA is showing many groups how to cooperate in the issemination of information and in the discussion of roblems having a direct bearing on a large segment f our country and affecting nearly all our population. epresentatives from farm groups, made up of two illion rural families, and cooperative extension serv-es, in touch with 10 million rural-urban families, as vell as others participate in this event.

Subject matter is presented in sufficient depth so hat the total problem can be easily visualized and nore easily acted upon.

While many of these problems are of a medical ature or have medical implications, they are not eally just the problem of the medical profession. hese are the problems of the people. As the meat of these conferences filters back through the millions of homes in this country, the people not only become aware of the magnitude of the problems, but also may be able to understand the steps that are necessary to assist in solving them.

Throughout the years, the programs of these conferences have always contained timely subjects. There has been a decided expansion in recent years, not only in the attendance and the number of groups involved, but also in the quality of the presentation. This now represents probably the foremost informational and educational effort that exists in this country today.

The conference that was held this year in Colorado Springs typifies the excellence of this endeavor. It was especially notable for the content of the program and the quality of the participating leadership. Matters such as water pollution control measures, health manpower and procurement, disaster mobilization of emergency hospitals, rural accident prevention and effective communication were presented.

Many of these problems obviously are not yet solved, but the broad participation in these programs by people from so many groups will certainly lead to a study of these problems from all angles. The more interest that is created by meetings like this, the more involved interested people will become.

Personalized Professional Service

Professional function and image . . . style . . . variety . . . you can enjoy all these benefits in design-coordinated offices and examining rooms created by Noble-Blackmer. If you prefer, we will even create a color scheme, and handle the interior decoration.

Noble-Blackmer stands ready to help you create an efficient, functional office that saves you time and energy . . . one which will create the proper professional image with your patient.

Depend on Noble-Blackmer for Supplies, Pharmaceuticals and Equipment for
- **Physicians** • **Hospitals**
- **Nursing Homes** • **Laboratories**

NOBLE-BLACKMER, Inc.
personalized professional service

801 S. Brown St.
Jackson, Michigan
Ph. (517) 787-3110

533 W. Whitcomb St.
Kalamazoo, Michigan
Ph. (616) 345-5125

(The following is digested from one of the several fine AMPAC brochures available to interested physicians. For a copy write to MDPAC, Box 169, East Lansing.)

Stresses Role of Physician as Opinion Maker in Political Affair

How are votes won?

For the most part, people make up their minds about whether to vote, and *how* to vote on the basis of advice from someone whose opinion they respect.

This is not a casual statement. It is backed up by careful, long-term research.

Candidates and party organizations appeal to their potential supporters and the party faithful alike through radio, television, billboards, campaign literature, speeches, sound trucks, posters, buttons, bumper stickers, newspaper advertisements and what have you. But no matter what communications techniques they employ, they are asking for the voter's support.

Yet, surveys establish that radio, television and the printed words have only *negligible* effects on the voting decisions most people actually make; and only *minute* effects on changing their voting decisions.

When someone asks you to support Jones for Congress, and asks you face-to-face, it's pretty hard to avoid exposure to the message, if nothing else.

This is the reason why party organizations place so much emphasis on the face-to-face contact made possible by good precinct organization.

And this is the reason why physicians should express their political opinions frequently, and to as many people as possible.

A typical campaign statement might go this way:

"This candidate votes the same way in Washington that he promises during a campaign. He keeps his word. He does his homework. He thinks before he votes. He's fiscally sensible. I think he's the best Representative we've sent to Congress in ten years."

Here are the three steps to effective political opinion making:

1. Knowing what you're going to say.
2. Saying it.
3. And keeping aware of the many opportunities within your daily routine of expressing your opinion.

Big Election Days Coming

Michigan voters on November 8 will select a ne
Governor, Lieutenant Governor, all state Representa
tives and Senators, two members of the State Board
Education, two members of the MSU Board of Tru
tees, two members of the U-M Board of Regents, tw
members of WSU Board of Governors, two membe
of the Michigan Supreme Court, Secretary of Stat
Attorney General, one U. S. Senator, and 19 U.
Representatives.

August 2—General Primary Election of all politic
parties.

August 10-31—County conventions of all political pa
ties will be held between these dates for the nom
nation of state officers.

September 3—Last date for holding the State Conve
tions of all political parties for the nomination
candidates for state offices.

September 6—Last day for filing of petitions to pla
local or county questions on the ballot at t
general election.

September 20—Last day to certify the ballot wordi
of local and county propositions to local or cou
ty clerks.

October 10—The last date to register for the gener
election. Places of registration shall be open f
registration between 8 a.m. and 8 p.m.

November 5—Deadline for absentee ballot applicatio
for the general election. Such applications mu
be made by 2 p.m.

November 8—General November Election.

Nitroglycerin
elladonna
Paregoric
Codeine
Cortisone
Aspirin
Digitalis
Vitamins
Penicillin
Miltown®

An eminent role in medical practice

- Clinicians throughout the world consider meprobamate a therapeutic standard in the management of anxiety and tension.
- The high safety-efficacy ratio of 'Miltown' has been demonstrated by more than a decade of clinical use.

Miltown®
(meprobamate)

Indications: Meprobamate is effective in relief of anxiety and tension states. Also as adjunctive therapy when anxiety may be a causative or otherwise disturbing factor. Although not a hypnotic, meprobamate fosters normal sleep through both its anti-anxiety and muscle-relaxant properties.

Contraindications: Previous allergic or idiosyncratic reactions to meprobamate or meprobamate-containing drugs.

Precautions: Careful supervision of dose and amounts prescribed is advised. Consider possibility of dependence, particularly in patients with history of drug or alcohol addiction; withdraw gradually after use for weeks or months at excessive dosage. Abrupt withdrawal may precipitate recurrence of pre-existing symptoms, or withdrawal reactions including, rarely, epileptiform seizures. Should meprobamate cause drowsiness or visual disturbances, the dose should be reduced and operation of motor vehicles or machinery or other activity requiring alertness should be avoided if these symptoms are present. Effects of excessive alcohol may possibly be increased by meprobamate. Grand mal seizures may be precipitated in persons suffering from both grand and petit mal. Prescribe cautiously and in small quantities to patients with suicidal tendencies.

Side effects: Drowsiness may occur and, rarely, ataxia, usually controlled by decreasing the dose. Allergic or idiosyncratic reactions are rare, generally developing after one to four doses. Mild reactions are characterized by an urticarial or erythematous, maculopapular rash. Acute nonthrombocytopenic purpura with peripheral edema and fever, transient leukopenia, and a single case of fatal bullous dermatitis after administration of meprobamate and prednisolone have been reported. More severe and very rare cases of hypersensitivity may produce fever, chills, fainting spells, angioneurotic edema, bronchial spasms, hypotensive crises (1 fatal case), anuria, anaphylaxis, stomatitis and proctitis. Treatment should be symptomatic in such cases, and the drug should not be reinstituted. Isolated cases of agranulocytosis, thrombocytopenic purpura, and a single fatal instance of aplastic anemia have been reported, but only when other drugs known to elicit these conditions were given concomitantly. Fast EEG activity has been reported, usually after excessive meprobamate dosage. Suicidal attempts may produce lethargy, stupor, ataxia, coma, shock, vasomotor and respiratory collapse.

Usual adult dosage: One or two 400 mg. tablets three times daily. Doses above 2400 mg. daily are not recommended.

Supplied: 'Miltown' (meprobamate) is available in two strengths: 400 mg. scored tablets and 200 mg. coated tablets. 'Meprotabs' (meprobamate) is available as 400 mg. white, coated, unmarked tablets. *Before prescribing, consult package circular.*

WALLACE LABORATORIES
Cranbury, N.J.

CM-7814

Campbell, Berry Lead Surgeons

President now of the Michigan Chapter of the American College of Surgeons is Darrell A. Campbell, M.D., Ann Arbor. Doctor Campbell replaces James Logie, M.D., of Grand Rapids.

Those elected include: president-elect, Robert E. L. Berry, M.D., Flint; re-elected secretary-treasurer, Robert F. Smith, M.D., Detroit; and councilors, Robert Northway, M.D., Saginaw, and Knell Brownson, M.D., Traverse City.

U-M Advances Barry, Payne; Hodges, Aide

University of Michigan Regents made three new appointments recently: Alexander Barry, Ph.D., was advanced from assistant dean to associate dean of the medical school; Beverly C. Payne, M.D., became assistant dean, and Prof. Fred J. Hodges, M.D., was also appointed to serve as assistant to Dean William Hubbard, Jr., M.D.

Dr. Barry, a member of U-M's anatomy faculty since his graduation from Harvard in 1938, had been assistant dean since 1963. He will continue to teach embryology. On the national scene, Dr. Barry is chairman of the anatomy committee of the National Board of Medical Examiners.

While Dr. Barry will be dealing with broad range of administrative problems, his successor as assistant dean, Dr. Payne, will work "at the intersection of the university and the community," said Dean Hubbard. Dr. Payne will remain a clinical assistant professor of internal medicine and maintain his private practice in Ann Arbor. As assistant dean, he will be active in the relating of medical school programs with community medical programs, especially regarding the quality and utilization of hospital care.

Dr. Hodges was chairman of U-M's Department of Radiology from 1931 until he went on retirement furlough last July. In his new role Dr. Hodges will assist and represent the dean in developing important new areas such as the regional medical program for heart disease, cancer, and stroke. Dr. Hodges will also have administrative responsibility in developing programs for related health professions and utilizing self-instructional and audiovisual teaching aids.

Scott Chosen Chairman For "Committee of 40"

Gordon H. Scott, Ph.D., vice president for th Wayne State University Medical School development is the chairman of the new statewide "Committee o Forty," organized to assess health services of voluntar agencies and state medical facilities.

The committee is an outgrowth of the Michiga Community Health Services Study sponsored by th U-M School of Public Health, the Michigan Department of Public Health and the Michigan Healt Officers Association.

Health activities of 11 state agencies were discussed at the organizational meeting.

The vice chairman is Walter C. Averill, presiden of the Michigan Association School Boards, Saginaw and secretary, Mrs. Gilbert Pingree, investment counselor with First of Michigan Detroit.

The executive committee members are: Willia John Upjohn, director of The Upjohn Company Kalamazoo, Roland Schwitzgoebel, professor, Northern Michigan University, Marquette; Orland J. Johnson, M.D., Bay City; W. D. Willard, fruit farme from Beulah; Louis Gordon, hospital administrato of Battle Creek Health Center; Richard Huegli, managing director of the United Community Services i Detroit.

Detroiter Leads Catholic Hospitals

The Very Rev. Msgr. John A. Trese, Archbishop representative for hospitals and executive director o the Archdiocesan Hospital Council, Detroit, is th new president of the Catholic Hospital Association.

Msgr. Trese, a native of Port Huron, is in charge o the War on Poverty program of the Archdiocese o Detroit and serves the social work and health field i many other capacities.

The Catholic Hospital Association, meeting i Cleveland for its 51st national convention, named it first sister as president-elect. Sr. Mary Brigh, O.S.F Administrator of St. Marys Hospital, Rocheste Minn., will succeed Msgr. Trese in 1967.

PLANS MSU MEETING

The annual meeting of the Michigan Thoraci Society and the Michigan Tuberculosis and Respiratory Disease Association, October 19-20 at MSU Kellogg Center, will feature Theodore Noehre M.D., of the State University of New York in Buffal He will describe his research work this past year i Finland.

rankly, most antihyper-
ensives are pretty good if
ou give an adequate dose.
m looking for one with a
imple regimen so that mix-
ps in doses and therefore
he chance of side effects
re minimized.

egroton®
lorthalidone 50 mg. reserpine 0.25 mg.

tablet daily
rings pressure down

vantage: Both components of Regroton
e long-acting.
erage dosage: One tablet daily with
eakfast.
ntraindications: History of mental
pression, hypersensitivity, and most
ses of severe renal or hepatic diseases.
rning: Discontinue 2 weeks before
neral anesthesia, 1 week before electro-
ock therapy, and if depression or
ptic ulcer occurs. With administration
enteric-coated potassium supplements,
possibility of small bowel lesions
ould be kept in mind.
ecautions: Reduce dosage of con-
mitant antihypertensive agents by one-
lf. Discontinue if the BUN rises or
er dysfunction is aggravated. Electro-
e imbalance and potassium depletion
y occur; take particular care in
rhosis or severe ischemic heart disease,
d in patients receiving corticosteroids,
TH, or digitalis. Salt restriction is not
commended. Use with caution in
tients with ulcerative colitis, gall-
nes, or bronchial asthma.
e effects: Nausea, vomiting, diarrhea,
scle cramps, headaches and dizziness.
tential side effects include angina pecto-
, anxiety, depression, drowsiness,
erglycemia, hyperuricemia, lassitude,
kopenia, nasal stuffiness, nightmare,
rpura, urticaria, and weakness.
r full details, see the complete prescrib-
information.
ilability: Bottles of 100 and 1000 tablets.

eigy

Urges More Courses In Junior Colleges For Health Workers

The Michigan Health Council is busy promoting more short-term and up-to-two-year associate degree programs in community colleges to help eliminate the shortage of health manpower in many fields. The Michigan Health Council hopes to embark on a program that would have the following purposes:

1. The eventual elimination of the shortage of health manpower by establishing an adequate number of associate degree programs in community colleges.

2. To encourage more high school graduates to continue their education by enrolling in their community college and securing the necessary training that will provide them with the knowledge and skill necessary to obtain employment in area hospitals, health departments, medical-dental offices, rehabilitation centers, etc.

3. To expand the many high school health-related programs training youth for semi-skilled, skilled, pre-technical and technical levels. Such programs of vocational education lead many youths to health careers following high school and others to go on with their community college for additional training in a health career.

The Michigan Health Council is confident that through a major expansion of education and training programs in health careers an adequate solution to the problem can be achieved. Approximately 3.5 to 4.0 million young people will reach age 18 each year during the next decade. These youths constitute a manpower resource that far surpasses the capacity of our educational programs in the health disciplines.

In order to achieve these goals, the Council will need the support and assistance of the professional health organizations and their auxiliaries throughout Michigan in addition to the educational institutions. Six regional health or health career councils are planning to work closely with the Michigan Health Council and its state advisory committee in determining health manpower requirements and resources in the six regions.

A good example of such cooperation can be found in the development of the Health Careers Council of Calhoun County. Members of the Auxiliary to the Medical Society were instrumental in interesting the County Guidance Counselors Association to team up with the medical auxiliary and nearly every professional association in the health field in Calhoun County to do something about the health manpower situation. Incorporated in February of 1966, the Calhoun council has already established committees to develop and distribute approved health career recruitment literature, exhibits, films to all county schools. The Michigan Health Council exhibit on health career was taken to 20 area schools during a six-week perio and arrangements have been made by the America Cancer Society-Calhoun County Unit to purchase a new MHC exhibit that can be used by the Healt Careers Council on a year-round basis in encouragin students to consider a career in the health field.

The Michigan Health Council will welcome inquiries from medical and allied health professionals auxiliaries and individuals who are interested in assisting in the development of health careers educationa programs and health career recruitment programs o a local, regional or statewide basis.

Babies and children have a greater chance to liv into adulthood: Since 1940, the death rate for babie under one year has dropped 54 per cent; for childre one to four years, 66 per cent; for children five t 14 years, down 60 per cent.

PLAINWELL SANITARIUM, INC.

Plainwell, Michigan—MU 5-8441

Edwin M. Williamson, M.D.
M. Leroy Barry, M.D.

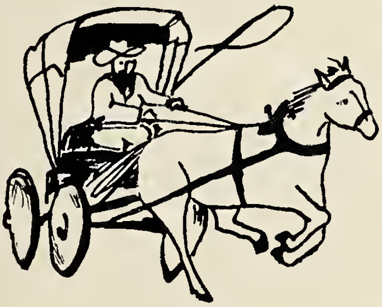
Dan W. Everett, M.D.
Wilbur R. King, Ph.D.

The Plainwell Sanitarium is a private psychiatric hospital licensed by the Michigan Department of Mental Health, and member of the American Hospital Association, Michigan Hospital Association, and National Association of Private Psychiatric Hospitals. Our extensive diagnostic treatment services include the following:

- Organic and psychological therapy for the psychiatrically and emotionally disturbed of all ages.
- Diagnostic evaluation of neurological disorders.
- Rehabilitative services for geriatric and convalescent patients.
- Medico-Legal counsel.
- Diagnostic and psychological evaluation and hospitalization, if indicated, of juveniles for Probate and Juvenile Courts.

Career Handbook Offered by MSMS

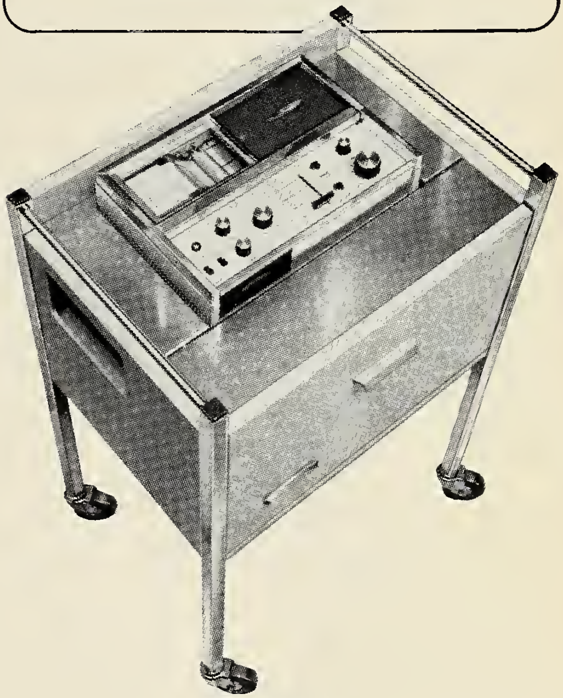
MSMS has inserted eight pages of Michigan information in a new AMA "Horizons Unlimited" career pocketbook for distribution to school counselors, libraries, youth-serving agencies and others who guide nd counsel young people. The above photo is featured in the booklet as it describes the "Challenge of Medicine" and suggests that there are "vast new medical horizons opening up as the result of promising xperiments in transplantations." The booklet is a roject of the MSMS Public Relations Committee. Interested MSMS members may obtain a copy of the ooklet for reference use in their reception rooms by writing to MSMS, 120 West Saginaw, East Lansing.



For Your Library

Copies of "A Century of Service in Medicine," published as a Centennial highlight by MSMS, are still available for cost, $2.00. The book, bound handsomely in blue, was written by Wm. J. Stapleton, Jr., M.D., of Detroit, the MSMS Historian. To obtain a copy, write to MSMS, 120 West Saginaw, East Lansing, and enclose a check.

The dramatically new
Burdick EK 4
Electrocardiograph



What is a new ECG?

Take a look at the Burdick EK 4! Many important improvements have been made in electrocardiographs in recent years — this is why we invite your closer inspection of the EK 4. Reliability, diagnostic accuracy, and freshness of design are apparent in every detail. Precise recordings of high fidelity ● Designed for use with auxiliary equipment, phone transmission, permanent recording of monitoring phenomena ● Fast switching from lead to lead ● 25-50 mm. speeds ● ½ x 1 x 2 standardization on all leads ● High frequency response permits use with PC-100 Heart Sound Preamp ● Stable ● Lightweight. If your present ECG can't offer you these up-to-date features, take a closer look at the EK 4. The EK 4 is a sound investment for your practice or department, and it's backed by Burdick dealer service. Write us. The Burdick Corporation, Milton, Wisconsin 53563.

THE G. A. INGRAM COMPANY
4444 Woodward Avenue, Detroit, Michigan 48201
Telephone: TEmple 2-4444

16 Winners Listed In TB Speech Event

Sixteen high school students won honors in the 24th annual TB Speaking Project, co-sponsored by the MTRDA and the Women's Auxiliary to the Michigan State Medical Society. State chairman for the Women's Auxiliary to MSMS was Mrs. Fred Maynard of Allen Park.

High schools throughout the state were alerted to the project in January and students began thinking, writing, and re-writing and rehearsing speeches based on topics aimed toward increased awareness of tuberculosis and the health hazards of smoking.

Approximately 3,000 students in 55 high schools participated in the project. From the hundreds of scripts prepared by the students 100 were chosen for judging at the state level. The six scripts rated highest by the judges won for their producers an opportunity to appear in Lansing on April 26 to attend a special luncheon in their honor and to present their award-winning talks over WKAR at Michigan State University. The ten others received honorable mention.

The top students invited to Lansing are: Ann Beck, Escanaba Area High School, Escanaba; Mary Kaye Kavinsky, St. Ambrose High School, Ironwood; John Mertz, Gabriels High School, Lansing; Sally Narhi, Baraga High School, Baraga; and Thomas Miller and Kenneth Sasse, Bullock Creek High School, Midland.

Students receiving honorable mention are: Robert Caplan, Whittier Junior High School, Flint; Karen Eldridge, Carson City-Crystal Area High School, Carson City; Cheryl LaBrie, Escanaba Area High School, Escanaba; Jeanne Maki, Eben High School, Eben; Margaret McGeehan, St. James High School, Bay City; Michael Melfi, Benton Harbor High School, Benton Harbor; Ronald Meyers, Gabriels High School, Lansing; Sharon Mick, Bullock Creek High School, Midland; Mary Kay Mioni, St. Ambrose High School, Ironwood; Lynn Montgomery, Mason County Central High School, Scottville; David Polzien, Gladwin High School, Gladwin; Marjorie Verran, Houghton High School, Houghton.

Final judging of scripts was performed by George A. Sherman, M.D., Lansing; Frederick Alexander, Michigan State University; and Eric Furseth, WILS, Lansing.

A number of local medical auxiliaries gave active support to the speaking project in their areas.

Four of every five traffic accidents in 1965 could have been avoided. The major cause of death and destruction on U. S. highways, says Travelers, is driver error and lack of judgment.

Bamadex® Sequels®

Contraindications: In hyperexcitability and in agitated prepsychotic states. Previous allergic or idiosyncratic reactions.

Precautions: Use with caution in patients hypersensitive to sympathomimetic compounds, who have coronary or cardiovascular disease, or are severely hypertensive.

Dextro-amphetamine sulfate: Use by unstable individuals may result in psychological dependence.

Meprobamate: Careful supervision of dose and amounts prescribed is advised; especially for patients with known propensity for taking excessive quantities of drugs. Excessive and prolonged use in susceptible persons, e.g. alcoholics, former addicts, and other severe psychoneurotics, has been reported to result in dependence. Where excessive dosage has continued for weeks or months, reduce dosage gradually. Sudden withdrawal may precipitate recurrence of pre-existing symptoms such as anxiety, anorexia, or insomnia; or withdrawal reactions such as vomiting, ataxia, tremors, muscle twitching and, rarely, epileptiform seizures. Should meprobamate cause drowsiness or visual disturbances, reduce dose—operation of motor vehicles, machinery or other activity requiring alertness should be avoided. Effects of excessive alcohol consumption may be increased by meprobamate. Appropriate caution is recommended with patients prone to excessive drinking. In patients prone to both petit and grand mal epilepsy meprobamate may precipitate grand mal attacks. Prescribe cautiously and in small quantities to patients with suicidal tendencies.

Side Effects: Overstimulation of the central nervous system, jitteriness and insomnia or drowsiness.

Dextro-amphetamine sulfate: Insomnia, excitability, and increased motor activity are common and ordinarily mild side effects. Confusion, anxiety, aggressiveness, increased libido, and hallucinations have also been observed, especially in mentally ill patients. Rebound fatigue and depression may follow central stimulation. Other effects may include dry mouth, anorexia, nausea, vomiting, diarrhea, and increased cardiovascular reactivity.

Meprobamate: Drowsiness may occur and can be associated with ataxia, the symptom can usually be controlled by decreasing the dose, or by concomitant administration of central stimulants. Allergic or idiosyncratic reactions: maculopapular rash, acute nonthrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever, transient leukopenia. A case of fatal bullous dermatitis, following administration of meprobamate and prednisolone, has been reported. Hypersensitivity has produced fever, fainting spells, angioneurotic edema, bronchial spasms, hypotensive crises (1 fatal case), anuria, stomatitis, proctitis (1 case), anaphylaxis, agranulocytosis and thrombocytopenic purpura, and a fatal instance of aplastic anemia, but only when other drugs known to elicit these conditions were given concomitantly. Fast EEG activity, usually after excessive dosage. Impairment of visual accommodation. Massive overdosage may produce drowsiness, lethargy, stupor, ataxia, coma, shock, vasomotor, and respiratory collapse.

30
Lederle
BAMADEX
DEXTRO-AMPHETAMINE SULFATE
WITH MEPROBAMATE
SEQUELS
Sustained Release Capsules
077-619

First aid for a button popper

Second aid for a button popper

Bamadex® Sequels®

d-amphetamine sulfate (15 mg.)
and meprobamate (300 mg.)

Sustained Release Capsules

By providing combined anorexigenic-tranquilizing action, BAMADEX SEQUELS Capsules help your nonshrinking patients to establish new patterns of eating less. The amphetamine component suppresses the appetite, while the meprobamate helps allay nervousness and tension. And for most patients, the *sustained* release of the active ingredients makes possible convenient one-capsule-a-day dosage.

LEDERLE LABORATORIES • A Division of American Cyanamid Company, Pearl River, New York Lederle
6655

MHC Continues MD Recruitment

Michigan started the Medicare program July 1 with 140 more medical doctors than in 1965. Currently there are 8,307 doctors of medicine registered, compared with 8,167 in 1965. In addition, Michigan has 2,514 out-of-state M.D.s registered, compared to 2,404 in 1965. There are now 471 Michigan M.D.s in military service, compared to 432 a year ago.

The Michigan Health Council Professional Placement Service currently is assisting 61 of Michigan's 83 counties in their efforts to obtain medical doctors in general practice and 43 counties that are seeking medical specialists in 21 different categories.

To help fill the need, the Michigan Health Council has sponsored full-page advertisements about its MD Placement Service in national publications. Nearly 200 U.S. doctors and medical students have shown an interest in obtaining more information about practice opportunities in Michigan.

Nearly 700 doctors of medicine and Michigan communities have made use of the Placement Service since it was established in 1953.

WSU Hamman Center Plans for Research

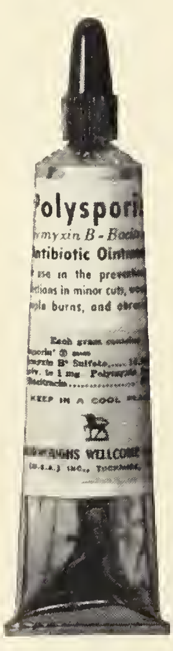
A center will be constructed in 1967 to house th elderly and serve as a research facility for the study o gerontology at Wayne State University.

To be called the Luella Hamman Gerontolog Center, it is expected to cost $2 million and will b located at the southeast corner of Woodward an Hancock. The university will share equally with th Hamman Fund the cost of the building. Gordon H Scott, vice president for Medical School Developmen at WSU, said that the university will seek funds fron the National Institutes of Health's research construction appropriations for its portion of the cost. Th center will be available for research and study in th fields of medicine, social work and psychology.

MERCK EXPANDS

RAHWAY, N. J.—Scientists, educators and government officials have dedicated a multi-million-dolla chemical and biological research center of Merc Sharp & Dohme Research Laboratories. More tha 350 visitors were welcomed in addresses by Henry W Gadsden, president of Merck & Co., Inc., and Dr Mac Tishler, president of the Laboratories, a divisio of Merck.

in treating topical infections, no need to sensitize the patient



USE 'POLYSPORIN'® brand POLYMYXIN B-BACITRACIN ANTIBIOTIC OINTMENT

broad-spectrum antibiotic therapy with minimum risk of sensitization

Caution: As with other antibiotic products, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs. **Contraindication:** This product is contraindicated in those individuals who have shown hypersensitivity to any of its components.
Supplied: In ½ oz. and 1 oz. tubes
Complete literature available on request from Professional Services Dept. PML.

BURROUGHS WELLCOME & CO. (U.S.A.) INC., Tuckahoe, N.Y.

)nce merely a man vith HAY FEVER— now a victim of his own antibodies

hatever term describes him in this new era of nmunology, the symptoms of congested nose, rhinorea and sneezing haven't changed in patients hypernsitive to pollens and molds. But NTZ® Nasal Spray lieves the symptoms. It decongests nasal memanes on contact, relieves itching and reduces ‹cessive rhinorrhea without unpleasant dryness. ie first spray of well-tolerated NTZ shrinks the rbinates, helps restore normal nasal ventilation ıd breathing. After a few minutes, a second ›ray enhances sinus ventilation and drainage.

ore than a simple vasoconstrictor, the carefully alanced formula of effective components relieves in ree ways with:

Veo-Synephrine® HCl 0.5%, a decongestant of ıexcelled efficacy to shrink nasal membranes and low more comfortable breathing.

Thenfadil® HCl 0.1%, a topical antihistamine to ›lp relieve itching and rhinorrhea.

Zephiran® Cl 1:5000, an excellent wetting jent and antiseptic preservative to promote e rapid spread of components to less ccessible nasal areas.

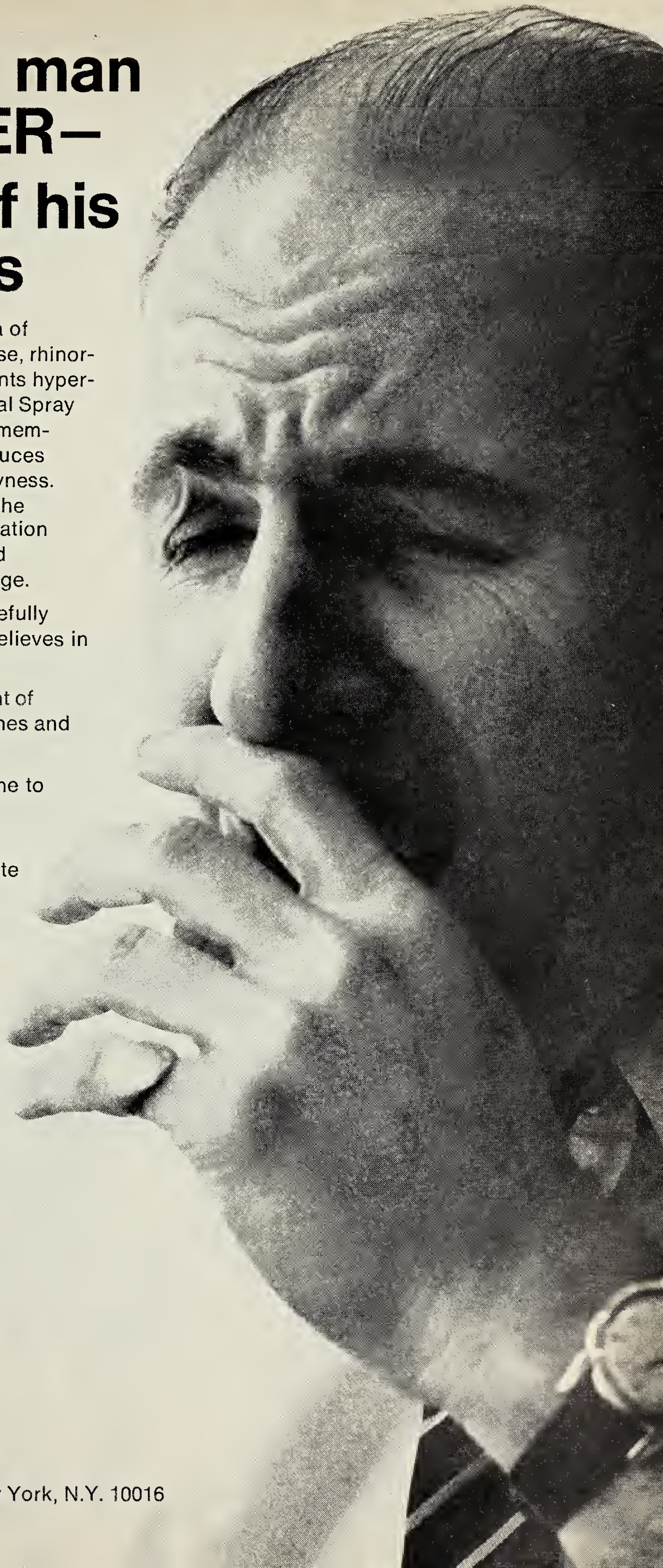
upplied in convenient pocket-size plastic ›ray bottle of 20 ml. Also available as a ›lution of 30 ml. (1 fl. oz.) with dropper, ıd 473 ml. (1 pint).

'rescribe

NTZ® Nasal Spray

›ntains Neo-Synephrine HCl)

Winthrop | Winthrop Laboratories, New York, N.Y. 10016



The most significant advance in analgesics since the isolation of morphine in 1805

Remarkable effectiveness and greater freedom from side reactions in the widest range of clinical applications

FOR PAIN

NUMORPHAN®

BRAND OF OXYMORPHONE, ENDO

A NEW ERA IN PAIN RELIEF

clinically tested for 5 years/evaluated in 120 U. S. hospitals/over a quarter of a million doses given/more than 25,000 patients treated

SUPPLIED:
Vials: 10 cc., singly and in boxes of three.
Ampuls: 1 cc. and 2 cc., in boxes of 12 and 100.
(Each cc. of NUMORPHAN* contains 1.5 mg. oxymorphone as the hydrochloride.)
Suppositories: 2 mg. and 5 mg., in boxes of 6.

THE G. A. INGRAM COMPANY
4444 Woodward Avenue, Detroit, Michigan 48201
Telephone: TEmple 2-4444

*U. S. Pat 2,806,033.

In Memoriam

William E. Blodgett, M.D., Detroit

William E. Blodgett, M.D., Michigan's first orthopedic surgeon, died June 26 at the age of 91 at his home in Detroit.

Doctor Blodgett was graduated from Harvard in 1896 and its medical school in 1900. He had been on the staff of Grace Hospital since entering practice in Detroit. Doctor Blodgett retired from active surgery in 1956.

A founder and member of the Clinical Orthopedic Society, Doctor Blodgett's other memberships included the American Orthopedic Association, the American Academy of Orthopedic Surgery, American College of Surgeons, Detroit Academy of Surgery, Detroit Academy of Orthopedic Surgery, and Phi Beta Pi honorary medical fraternity.

Doctor Blodgett was a life member of the Michigan State Medical Society and in 1954 received its 50 Year Award.

Among the survivors are two sons, William and James, both doctors of medicine.

Horace L. French, M.D., Lansing

Horace L. French, M.D., 69, Lansing pediatrician died June 8.

Born in Hillsdale, Doctor French was graduated from the University of Michigan Medical School in 1921. He served his pediatrics residency at the University of Michigan and Philadelphia Children's Hospitals. Doctor French was a member of the executive staff and chief of the pediatrics department of St Lawrence Hospital as well as a member of the staf of Sparrow and Ingham Medical Hospitals.

A founder and past president of the Western Michigan Pediatrics Society, Doctor French was a membe of the American Academy of Pediatrics and the University of Michigan Pediatric and Infectious Diseas Society. His medical fraternity was Theta Kappa Psi

During World War I Doctor French was in th Medical Reserve.

Among the survivors is Lawrence W. French, M.D of Grosse Pointe Woods.

Cyril F. Hanft, M.D., Springport

Cyril F. Hanft, M.D., 69, retired Springport physician, died May 20 in Foote Hospital, Jackson.

Born in Columbus Junction, Iowa, Doctor Hanf was graduated from the University of Michigan Mec

'Dexamyl' does more than most anorectics. Because it curbs appetite *and* lifts mood, 'Dexamyl' can encourage the discouraged dieter to stay on her diet.

The mood lift with 'Dexamyl' can make the difference between the success or failure of her diet plan.

Thanks to Dexamyl®

brand of
dextroamphetamine
sulfate and amobarbital

she can say "No thank you" to the crêpes suzette.

Formulas: Each 'Dexamyl' Spansule® Capsule (brand of sustained release capsule) No. 1 contains 10 mg. of Dexedrine® (brand of dextroamphetamine sulfate) and 1 gr. of amobarbital, derivative of barbituric acid [Warning, may be habit forming]. Each 'Dexamyl' *Spansule* capsule No. 2 contains 15 mg. of Dexedrine (brand of dextroamphetamine sulfate) and 1½ gr. of amobarbital [Warning, may be habit forming].

Principal cautions and side effects: Use with caution in patients hypersensitive to sympathomimetics or barbiturates and in coronary or cardiovascular disease or severe hypertension. Insomnia, excitability and increased motor activity are infrequent and ordinarily mild.

Before prescribing, see SK&F product Prescribing Information.

Smith Kline & French Laboratories SK&F

ical School in 1929. Doctor Hanft also held a B.S. degree of pharmacy.

Doctor Hanft's hospital affiliations included Foote and Mercy Hospitals of Jackson, Sheldon Memorial, Albion, and Community Hospital, Eaton Rapids.

Jacob R. Rupp, M.D., Detroit

Jacob R. Rupp, M.D., general practitioner, Detroit, died May 17. He was 79. A native of Detroit, Doctor Rupp received his medical degree from the University of Chicago School of Medicine in 1916. Doctor Rupp's hospital affiliations were Park General and Alexander Blain, both of Detroit.

During World War I Doctor Rupp served in the Medical Corps.

Doctor Rupp was a life member of the Michigan State Medical Society.

John D. Van Schoick, M.D., Hanover

John D. Van Schoick, M.D., past president of the Jackson County Medical Society and former delegate to the MSMS House of Delegates, died May 24 in Foote Hospital, Jackson. He was 72.

A native of Jackson, Doctor Van Schoick received his medical degree from the University of Michigan Medical School in 1919. A former chief of staff of Foote Hospital, Jackson, Doctor Van Schoick was also affiliated with the Hillsdale Community Health Center, Hillsdale.

In 1962 Doctor Van Schoick was honored by the residents of Hanover at the beginning of his 43rd year of medical practice there. Doctor Van Schoick served on the Appeal Board of the Jackson County Selective Service for 22 years. His medical fraternity was Pi Upsilon Rho.

Doctor Van Schoick was a life member of the Michigan State Medical Society.

Among the survivors is Frank Van Schoick, M.D., Jackson pediatrician.

U-M Hospital Adds New Pharmacy Unit

The University of Michigan Medical Center has opened its new half-million-dollar hospital pharmacy.

Located within the thousand-bed University Hospital the pharmacy serves as a training ground for 20 graduate students interested in the hospital pharmacy career field.

A.H.C.P.
PLEASE
TAKE ONE!

AMERICAN HEALTH CREDIT PLAN

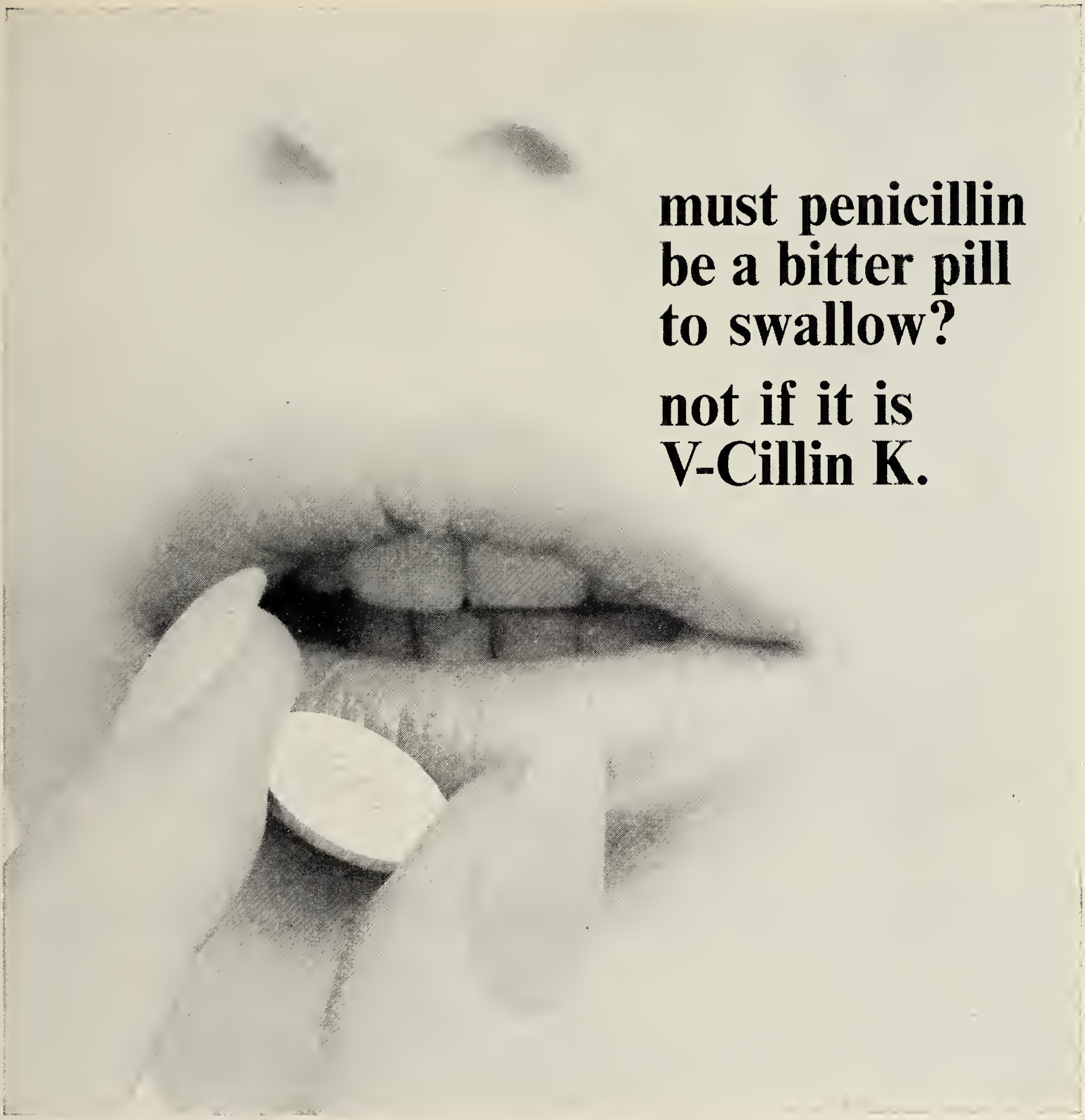
A Service For You
And Your Patients

And this service begins by informing your patients about the American Health Credit Card, which permits them to pay you immediately for the health and medical services you perform.

That's the job of these American Health Credit Plan brochures contained in this attractive office and waiting room dispenser. You should have one by now, but if you don't and would like to receive the full story on how A.H.C.P. benefits you, send a note to:

American Health Credit Plan of Michigan, Inc.
11 Green Street, Battle Creek, Mich.

A.H.C.P. and the U.S. Mail will do the rest.



V-Cillin K now has a unique glossy coating that banishes bitter penicillin taste and makes it easier to swallow. Within six seconds (just long enough for the tablet to get past the taste buds), the coating dissolves and the penicillin is ready for immediate absorption into the bloodstream. The patient still gets all the special benefits of V-Cillin K, including consistent dependability . . . even in the presence of food.

Indications: V-Cillin K is an antibiotic useful in the treatment of infections caused by streptococci, pneumococci, and sensitive strains of staphylococci.

Contraindications and Precautions: Although sensitivity reactions are much less common after oral than after parenteral administration, V-Cillin K should not be administered to patients with a history of allergy to penicillin. As with any antibiotic, observation for overgrowth of nonsusceptible organisms during treatment is important.

Usual Dosage Range: 125 mg. (200,000 units) three times a day to 250 mg. every four hours.

Supplied: Tablets V-Cillin K, 125 or 250 mg.; also, V-Cillin K, Pediatric, 125 mg. per 5-cc. teaspoonful, in 40, 80, and 150-cc.-size packages.

V-Cillin K® **Six-Second Barrier to Bitterness**

Potassium Phenoxymethyl Penicillin

600802

Additional information available to physicians upon request. Eli Lilly and Company, Indianapolis, Indiana 46206.

Lilly

Biologic Products Offered to MD's

The Michigan Department of Public Health offers to health officers and physicians in the state a number of biologic products for the prevention, diagnosis, or control of certain diseases, as well as a variety of laboratory diagnostic and reference services.

All such products and services are available without charge for citizens of Michigan through the local health department offices and practicing physicians who may request products or submit specimens in their behalf.

Laboratory Diagnosis and Reference

To facilitate the satisfactory collection and transmission of specimens for laboratory examination, the Bureau of Laboratories of the state health department assembles and furnishes suitable containers. These are available free of charge and may be obtained through the local health departments. An appropriate form is enclosed with each container assembly to identify the specimen, the patient, and the physician, and to indicate the particular test desired. Specimen containers may be obtained from the central laboratory in Lansing or from the region divisional laboratories as follows:

Division of Western Michigan
Bureau of Laboratories
Michigan Department of Public Health
Grand Rapids, Michigan 49503

Division of Powers
Bureau of Laboratories
Michigan Department of Public Health
Powers, Michigan 49874

Division of Houghton
Bureau of Laboratories
Michigan Department of Public Health
Houghton, Michigan 49931

A brochure listing all the diagnostic and refe ence services available from the Lansing and branc laboratories is available upon request to the Chie Bureau of Laboratories, Michigan Department Public Health, Lansing, 48914.

Biologic Products

The following is a list of the biologic produc which are distributed by the state health departme through the Division of Epidemiology.

★

Specialized Service

IN

PROFESSIONAL LIABILITY INSURANCE

is a high mark of distinction

THE

MEDICAL PROTECTIVE COMPANY

FORT WAYNE, INDIANA

Professional Protection Exclusively since 1899

DETROIT OFFICE:

G. A. Triplett, R. K. Wind, and G. J. Haworth, Representatives

2405 West McNichols Road, Detroit 48221 Telephone: 313-862-8064

Unit	Product
	Antitoxins
,000 unit bottle	Diphtheria Antitoxin (horse)
,000 unit bottle	H. Influenzae Type B Antiserum (rabbit)
lose bottle	Snake Antivenin (horse)
.,500 unit bottles	Tetanus Antitoxin (horse)
,000 unit bottle	Tetanus Antitoxin (horse)
	Human Blood Products
lose bottle	Antihemophilic Globulin (human) dried
lose bottle	Dried Fibrinogen (human)
:c bottle	Normal Serum Albumin (human)
cc bottles	Immune Serum Globulin (human)
	Antigens
0d bottle of ea.	Diphtheria Toxin and Control for Schick Test
dose bottle	Diphtheria and Tetanus Toxoid, $AlPO_4$
dose bottle	Diphtheria and Tetanus Toxoid, $AlPO_4$ & Pertussis Vaccine
ose bottle	Diphtheria-Tetanus Toxoid $AlPO_4$-Pertussis & Polio Vaccine
ose bottle	Histoplasmin
dose bottles	Normal Horse Serum (diluted)
dose bottles	Normal Rabbit Serum (diluted)
ose bottle	Pertussis Vaccine
dose bottles	Rabies Vaccine (rabbit)
ose package	Smallpox Vaccine (calf)
dose package	Smallpox Vaccine (calf)
dose bottles	Tetanus Toxoid, $AlPO_4$
dose bottle	Tetanus Toxoid, $AlPO_4$
dose bottle	Tetanus & Diphtheria Toxoids, $AlPO_4$ (adult)
0 dose bottles	Tuberculin, Old, diluted
dose bottles	Typhoid Vaccine
dose bottle	Typhoid-Paratyphoid Vaccine
	Miscellaneous
ampule package	Silver Nitrate (ophthalmic)
dose pkg. (clinic)	Old Tuberculin
00 dilution (spec.)	Old Tuberculin
ml btl. (100d)	Sodium Fluoride—topical application

or further information about biologic products, te to the Division of Epidemiology, Michigan Detment of Public Health, Lansing, Michigan 14.

STAFF PHYSICIAN

An excellent opportunity for a physician is available in the Department of Occupational Medicine at the Midland, Michigan, headquarters of one of the nation's foremost companies.

Relocation expenses
will be paid.
Compensation commensurate
with background.
Comprehensive benefits program.

Phone (517) 636-2243
or write for further information
Benjamin Holder, M.D., Medical Director

THE DOW CHEMICAL COMPANY
P.O. Box 469, Midland, Michigan

An equal opportunity employer

DOW

SAMMOND PLEASANT LODGE

Offers to the elderly and chronically ill

Peace and quiet. Freedom of a large and richly furnished home and acres of lawns and wooded rolling grounds, scientifically prepared tasty meals, congenial companionship. A real

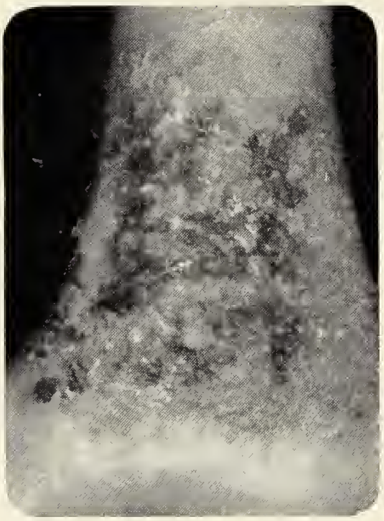
"Home away from Home"

Member of Michigan and American Nursing Home Associations. Highly recommended by members of the Medical Profession who have had patients at the Lodge.

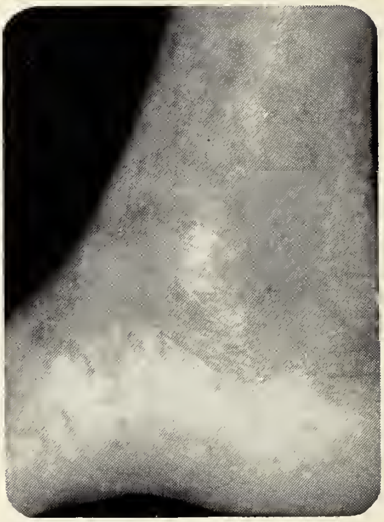
For further information write to:

SAMMOND PLEASANT LODGE
124 West Gates Street
Romeo, Michigan
Plateau 2-2591

Eczema of many years... controlled in two weeks



Before treatment



After treatment —
with ARISTOCORT Topical
Ointment 0.1% for two weeks

ARISTOCORT® Triamcinolone Acetonide Topicals have proved exceptionally effective in the control of various forms of eczema: allergic, atopic, nummular, psoriatic, and mycotic.

In most cases responsive to topical ARISTOCORT, the 0.1% concentration is sufficiently potent. The 0.5% concentration provides enhanced topical activity for patients requiring additional potency for proper relief.

Administration and Dosage: Apply sparingly to the affected area 3 or 4 times daily. Some cases of psoriasis may be more effectively treated if the 0.1% Cream or Ointment is applied under an occlusive dressing.

Contraindications: Tuberculosis of the skin, herpes simplex, chicken pox and vaccinia.

Precautions and Side Effects: Do not use in the eyes or in the ear (if drum is perforated). A few individuals react unfavorably under certain conditions. If side effects are encountered, the drug should be discontinued and appropriate measures taken. Use on infected areas should be attended with caution and observation, bearing in mind the potential spreading of infection and the advisability of discontinuing therapy and/or initiating antibacterial measures. Generalized dermatological conditions may require systemic corticosteroid therapy. Steroid therapy, although responsible for remissions of dermatoses, especially of allergic origin cannot be expected to prevent recurrence. The use over extensive body areas, with or without occlusive nonpermeable dressings, may result in systemic absorption. Appropriate precautions should be taken. When occlusive nonpermeable dressings are used, miliaria, folliculitis and pyodermas will sometimes develop. Localized atrophy and striae have been reported with the use of steroids by the occlusive technique. When occlusive nonpermeable dressings are used, the physician should be aware of the hazards of suffocation and flammability. The safety of use on pregnant patients has not been firmly established. Thus, do not use in large amounts or for long periods of time on pregnant patients.

Available in 5 Gm. and 15 Gm. tubes and ½ lb. jars.

PHOTOGRAPHS COURTESY OF M. M. NIERMAN, M.D.

Aristocort® Topical Ointment 0.1% and Cream 0.1%, 0.5%
Triamcinolone Acetonide
Also available in foam form.

Lederle LEDERLE LABORATORIES, A Division of American Cyanamid Company, Pearl River, New York

406-6

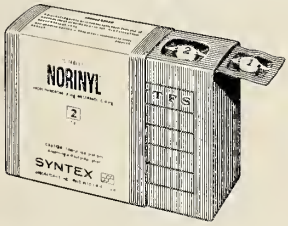
plus important supportive benefits that help her through those critical early months of oral contraception

low incidence of side effects

Low incidence of BTB and spotting, nausea and amenorrhea tends to minimize side effect problems and increases patient cooperation.

no confusion about dosage

An unbreakable "confusionproof" package makes it easy to adhere to prescribed dosage schedule: individually sealed tablets numbered from 1 through 20 *plus* monthly calendar record enables patient to double-check dosage intake by day and corresponding tablet number.



Contraindications: Thrombophlebitis or pulmonary embolism (current or past). Existing evidence does not support a causal relationship between use of Norinyl and development of thromboembolism. While a study which was conducted does not resolve definitively the possible etiologic relationship between progestational agents and intravascular clotting, it tends to confirm the findings of the Ad Hoc Advisory Committee appointed by the Food and Drug Administration to review this possibility. Cardiac, renal or hepatic dysfunction. Carcinoma of the breast or genital tract. Patients with a history of psychic depression should be carefully studied and the drug discontinued if depression recurs to marked degree. Patients with a history of cerebral vascular accident.

Warning: Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions, medication should be withdrawn.

Precautions: By May 1963, experience with norethindrone 2 mg.—mestranol 0.1 mg. had extended over 24 months. Through miscalculation, omission or error in taking the recommended dosage of Norinyl, pregnancy may result. If regular menses fail to appear and treatment schedule has not been adhered to, or if patient misses two menstrual periods, possibility of pregnancy should be resolved before resuming Norinyl. If pregnancy is established, Norinyl should be discontinued during period of gestation since virilization of the female fetus has been reported with oral use of progestational agents or estrogen. When lactation is desired, withhold Norinyl until nursing needs are established. Existing uterine fibroids may increase in size. In metabolic or endocrine disorders, careful clinical preevaluation is indicated. A few patients without evidence of hyperthyroidism had elevated serum protein-bound iodine levels, which in the light of present knowledge, does not necessarily imply hyperthyroidism. Protein-bound iodine increased following estrogen administration. Bromsulphalein retention has occurred in up to 25% of patients without evidence of hepatic dysfunction. Studies from 24-hour urine collections have shown an increase in aldosterone and 17-ketosteroids and decrease in 17-hydroxycorticoid levels. Thus, Norinyl should be discontinued prior to and during thyroid, liver or adrenal function tests. Because progestational agents may cause fluid retention, conditions such as epilepsy, migraine and asthma require careful observation. Thus far no deleterious effect on pituitary, ovarian or adrenal function has been noted; however, long-range possible effect on these and other organs must await more prolonged observation. Norinyl should be used with caution in patients with bone, renal or any disease involving calcium or phosphorus metabolism.

Side Effects: Intermenstrual bleeding; amenorrhea; symptoms resembling early pregnancy, such as nausea; breast engorgement or enlargement, chloasma and minor degree of fluid retention (if these should occur and patient has not strictly adhered to medication plan, she should be tested for pregnancy); weight gain; subjective complaints such as headache, dizziness, nervousness, irritability; in a few patients libido was increased. In a total of 3,090 patients, 2.2% discontinued medication because of nausea.

NOTE: See sections on contraindications and precautions for possible side effects on other organ systems.

Dosage and Administration: One Norinyl tablet orally for 20 days, commencing on day 5 through and including day 24 of the menstrual cycle. (Day 1 is the first day of menstrual bleeding.)

Availability: Dispensers of 20 and 60 tablets; bottles of 100.

References: 1. Council on Drugs. JAMA 187:664 (Feb. 29) 1964. 2. Bryans, F. E.: Canad Med Ass J 92:287 (Feb. 6) 1965. 3. Goldzieher, J. W.: Med Clin N Amer 48:529 (Mar.) 1964. 4. Cohen, M. R.: Paper presented at Symposium on Low-Dosage Oral Contraception, Palo Alto, Calif., July 15, 1965. Reported in Med Sci 16:26 (Nov.) 1965. 5. Hammond, D. O.: Ibid. 6. Rice-Wray, E., Goldzieher, J. W., and Aranda-Rosell, A.: Fertil Steril 14:402 (Jul.-Aug.) 1963. 7. Goldzieher, J. W., Moses, L. E., and Ellis, L. T.: JAMA 180:359 (May 5) 1962. 8. Kempers, R. D.: GP 29:88 (Jan.) 1964. 9. Tyler, E. T.: JAMA 187:562 (Feb. 22) 1964. 10. Rudel, H. W., Martinez-Manautou, J., and Maqueo-Topete, M.: Fertil Steril 16:158 (Mar.-Apr.) 1965. 11. Flowers, C. E., Jr.: N Carolina Med J 25:139 (Apr.) 1964. 12. Goldzieher, J. W.: Appl Ther 6:503 (June) 1964. 13. The Control of Fertility. Report adopted by the Committee on Human Reproduction of the American Medical Association. JAMA 194:462 (Oct. 25) 1965. 14. Flowers, C. E., Jr.: JAMA 188:1115 (June 29) 1964. 15. Merritt, R. I.: Appl Ther 6:427 (May) 1964. 16. Newland, D. O.: Paper presented at Symposium on Low-Dosage Oral Contraception, Palo Alto, Calif., July 15, 1965. Reported in Med Sci 16:26 (Nov.) 1965.

norethindrone—an original steroid from
SYNTEX
LABORATORIES INC., PALO ALTO, CALIF.

Norinyl® tablets
(norethindrone 2 mg. c̄ mestranol 0.1 mg.)

for multiple contraceptive action

DISABILITY PROTECTION *with* RENEWAL GUARANTEES

The Group Disability Insurance Plan sponsored by the Michigan State Medical Society now provides a conversion privilege to each practicing insured member under 65 years of age if for some reason the master policy should be terminated or if you should leave Michigan.

The conversion policy will provide the same coverage as the master policy and will be guaranteed renewable to age 70. This gives you a real equity in the renewal of your disability insurance.

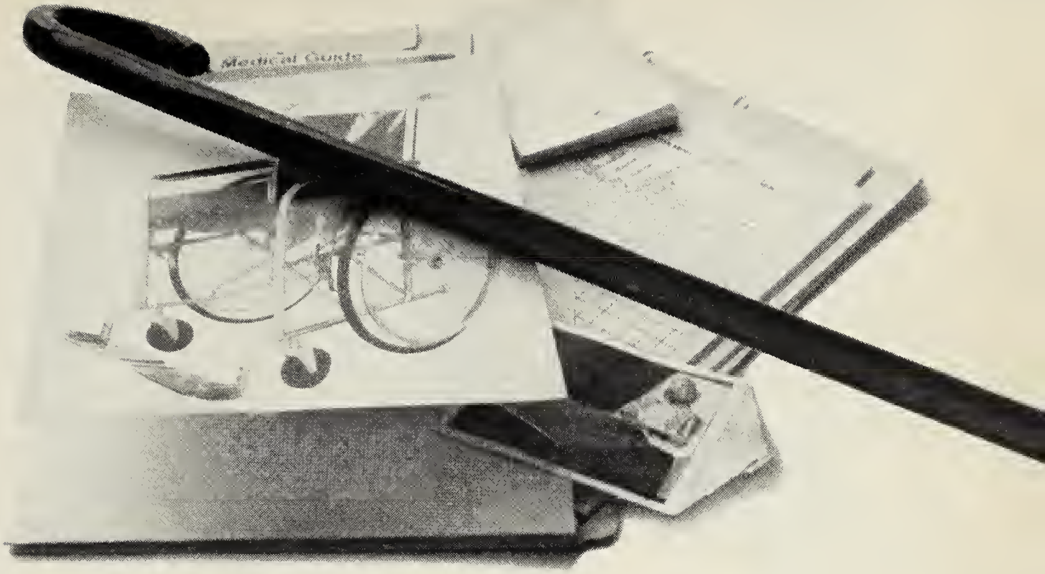
Are you now protected?

Make certain the RENEWAL of your Disability Insurance i

GUARANTEED!!

Provident Life and Accident Insurance Co

Ben P. Stratton Agency, Inc
Administrators
P.O. Box 547
Lansing, Michigan



in chronic illness

B and C vitamins are part of therapy: An imbalance of water-soluble vitamins and chronic illness often go hand in hand. STRESSCAPS capsules, containing therapeutic quantities of vitamins B and C, are formulated to meet the increased metabolic demands of patients with physiologic stress. In chronic illness, as with many stress conditions, STRESSCAPS vitamins are therapy.

Stresscaps®
Stress Formula Vitamins Lederle

FOR PROFESSIONAL RECOMMENDATION ONLY

Each capsule contains:

Vitamin B_1 (as Thiamine Mononitrate)	10 mg
Vitamin B_2 (Riboflavin)	10 mg
Vitamin B_6 (Pyridoxine HCl)	2 mg
Vitamin B_{12} Crystalline	4 mcgm
Vitamin C (Ascorbic Acid)	300 mg
Niacinamide	100 mg
Calcium Pantothenate	20 mg

Recommended intake: Adults, 1 capsule daily, for the treatment of vitamin deficiencies. Supplied in decorative "reminder" jars of 30 and 100; bottles of 500.

LEDERLE LABORATORIES, A Division of American Cyanamid Company, Pearl River, New York

Lederle

628-6—3614

STRESSCAPS

Soyalac

SOLVES THE PROBLEM

for the infant who requires a milk-free diet!

Loma Linda
Soyalac
CONCENTRATED
LIQUID
Hypoallergenic
For Infants Children and Adults
Loma Linda Foods

- Soyalac satisfies! Baby is happy, mother is grateful, doctor is gratified.
- The nut-like taste is pleasing. Infants readily accept this hypoallergenic formula that is completely fibre-free. An exclusive process results in a consistency much like milk.
- Soyalac is strikingly similar to mother's milk in composition and ease of assimilation. Clinical data furnish evidence of Soyalac's value in promoting normal growth and development.
- Excellent for regular infant feeding, too—and for growing children and adults.

Soyalac

a product of
LOMA LINDA FOODS
MEDICAL PRODUCTS DIVISION
RIVERSIDE, CALIFORNIA
Mount Vernon, Ohio, U. S. A.

Free Booklet and Samples

A request on your professional letterhead or prescription form will bring to you complete information and a supply of samples.

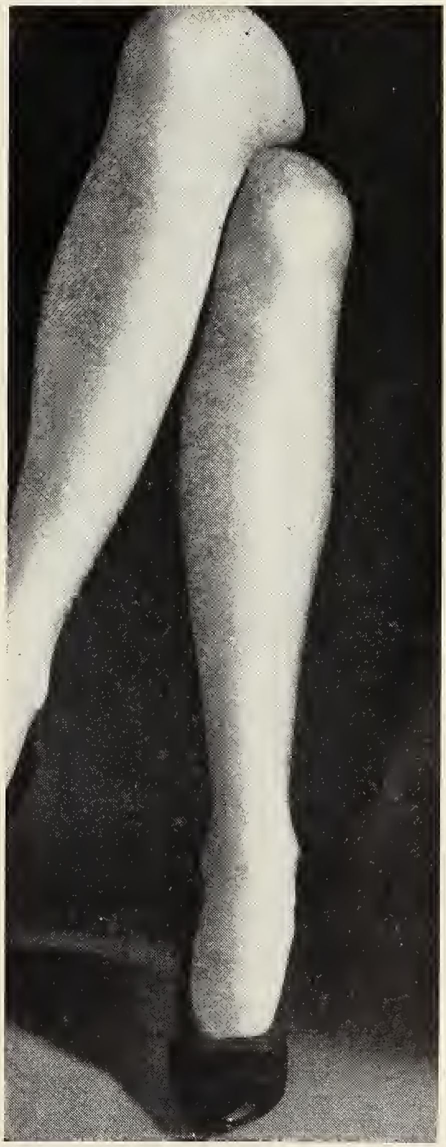
If you can't alarm her into wearing elastic stockings...

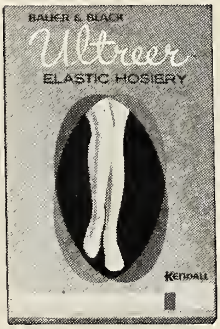
charm her with Ultreer™

You see, a woman simply has no defense against Ultreer Elastic Stockings. They look like lovely support stockings. They feel like lovely support stockings. They're that sheer, and shapely and comfortable.

But that's where the similarities end. New Ultreer fits firmly and evenly over the entire leg. Gives true therapeutic compression necessary to relieve varicose veins and other leg disorders. Each pair provides the therapy you prescribe. And at such a low price, a woman can afford two pairs of Ultreer as easily as she can afford one pair of ordinary elastic hosiery.

Ultreer. What a stocking.





KENDALL
BAUER & BLACK SUPPORTS DIVISION

CLASSIFIED ADVERTISING

$2.50 per insertion of fifty words or less, with an additional five cents per word in excess of fifty.

PEDIATRICIAN wishes association with a clinic or group. Recently completed residency at Children's Hospital of Michigan. Detroit Eastside preferred. Reply: Box 23, 120 West Saginaw Street, East Lansing, Michigan.

AGGRESSIVE SURGEON to head dynamic seven-man multi-specialty group with our ultra-modern clinic and hospital in Detroit suburb. Challenging scientific environment. Most rewarding financial arrangements. Write Box 18, 120 W. Saginaw Street, East Lansing, Michigan.

MEDICAL SUITES, specialist desired, Newbergh Heights Medical Village, immediate occupancy, heating, air conditioning, FM system, intercom phone system, leaded x-ray room, luxurious reception room. Seeing is believing. Call area code 313-PA 2-5130.

RADIOLOGIST—for 100-bed hospital in suburban Detroit. Salary open. Write Box 28, 120 W. Saginaw Street, East Lansing, Michigan.

PHYSICIAN POSITIONS available in the Medical/Surgical Service or ward areas of a progressing psychiatric hospital. Active teaching program. Salary up to $18,771 per annum, plus 6% increase in July. Contact: L. J. Marx, M.D., Clinical Director, Ypsilanti State Hospital, Ypsilanti, Michigan 48197.

GENERAL PRACTITIONER, age 32 or under, U. S. trained, prior military service, for multi-specialty group practice near metropolitan area, lead to partnership. Reply Box 27, 120 West Saginaw Street, East Lansing, Michigan.

WANTED: Additional Physician for Student Health Service. Cultural environment on beautiful Lake Superior in the midst of excellent hunting, fishing and winter sports. Increasing fringe benefits, rotating calls, paid vacation, salary negotiation. Write Dean Allan Niemi, Northern Michigan University, Marquette, Michigan.

FOR RENT: Office space, 7 rooms completely equipped for Ophthalmologist or Otolaryngologist. Write: W. C. Behen, M.D., 535 S. Capitol Avenue, Lansing, Michigan.

FOR RENT: Doctors eleven-room clinic in Mason, 12 miles from Lansing. Has been occupied by doctors for over 25 years. Wonderful opportunity for professional man to establish a future. Shortage of medical services in this charming and thriving community with many churches and good schools. Contact: Delmar Kramer, Dart National Bank, Mason, Michigan, ORchard 7-3661, evenings ORchard 6-5586.

OB-GYN to join multi-specialty group. Growth area. Write Box 15, 120 W. Saginaw Street, East Lansing, Michigan.

WANTED: Ophthalmologist, Board Eligible or Board Certified, for large Detroit, Michigan, practice. Starting salary $24,000 to $30,000 plus percentage. To start any time. Write Box 22, 120 W. Saginaw Street, East Lansing, Michigan.

EASTERN WISCONSIN CLINIC in rapidly growing community of 40,000 desires board-eligible or certified physicians in pediatrics, obstetrics and gynecology, and internal medicine. Well-equipped clinic and excellent hospital facilities. Lake shore location offers ample recreational facilities. Attractive financial plan leading to early full partnership. Full expenses paid for applicants invited to interview. Call or write: F. L. Hildebrand, M.D., Riverside Clinic, Menasha, Wisconsin.

PHYSICIAN WANTED: Staff physician for 3000-bed facility for mental retardates in southern Michigan. Salary range $15,200 to $18,500. Housing available at minimal rate. Liberal leave allowances and other fringe benefits. Citizenship and eligibility for Michigan licensure required. Write Medical Superintendent, Box 148, Coldwater, Michigan.

OB-GYN man looking for clinic asso tion or good location for private p tice. Reply to Box 24, 120 West S inaw Street, East Lansing, Michiga

WANTED PHYSICIAN interested general practice with six-man grou suburbs of Detroit. Delicious salary future partnership. Write Box 17, West Saginaw Street, East Lans Michigan.

FOR LEASE by non-profit organizat Medical Clinic, room for two or t doctors and 1 dentist. Reply W C. Proctor, Secretary, or Elmer C rad, President, Dr. O. R. MacKe Clinic, P. O. Box 164, Walled L Michigan.

INTERNIST, age 35 or under, U trained, prior military service, for ti-specialty group practice near me politan area, lead to partnership. R Box 26, 120 W. Saginaw Street, Lansing, Michigan.

DUCK HUNTERS ATTENTI Guide service now being offered Northwest Saginaw Bay, where t is lower hunting pressure, more du better shooting, decoys, blinds world's best layout boats provi Free picture brochure. John Pest Standish, Michigan.

INTERNAL MEDICINE & SURGE (Charlevoix, Michigan) (Charle County, area 2)—Community of with 60,000 drawing area, offers portunity for specialist in inte medicine and surgery. Beautiful r ern hospital of 52 beds, located beautiful Lake Michigan; in indust and summer and winter resort A new doctor's office, designed f four-man operation, is soon to under construction, on the hos grounds. Contact: Charlevoix H tal Board of Trustees. Anne B gartner, Administrator, Charle Hospital, Charlevoix, Michigan.

Established 1924

MERCYWOOD HOSPITAL

4038 Jackson Road — *Conducted by Sisters of Mercy* — Ann Arbor, Michigan

Telephone—313 663-8571

Mercywood Hospital is a private neuro-psychiatric hospital licensed by the Michigan Department of Mental Health. Mercywood specializes in intensive, multi-disciplinary treatment for emotional and mental disorders.

Accredited by the Joint Commission on Accreditation of Hospitals and the National League of Nursing. A full Blue Cross participating hospital.

Certified for: Medicare and M.A.A. programs.

PSYCHIATRIC STAFF

Robert J. Bahra, M.D.
Dean P. Carron, M.D.
Francis M. Daignault, M.D.
Gordon C. Dieterich, M.D.
Stuart M. Gould, Jr., M.D.
Leonard E. Himler, M.D.
Stephen C. Mason, M.D.
Richard D. Watkins, M.D.
Rudolf E. Nobel, M.D.
Sydney Joseph, M.D.
James R. Driver, M.D.

THESE ADVERTISERS HELP MAKE MICHIGAN MEDICINE POSSIBLE

ott ... 613, 614, 615, 616
erican Health Credit Plan ... 666
es Co., Inc. ... Cover III

roughs Wellcome & Co. ... 662

ssified Advertising ... 678

sey ... 605, 606, 607, 608
Chemical Co. ... 669

r Company, Paul B. ... 648

gy ... 657

son, Westcott & Dunning, Inc. ... 597

am Co., G. A. ... 659, 664

dall ... 677
swood Hospital ... 612

erle Laboratories ... 650, 651, 660, 661, 670, 675
, Eli and Co. ... 619, 620, 667
a Linda Foods ... 676

Medical Protective ... 668
Mercywood Hospital ... 679

Noble-Blackmer, Inc. ... 653

Parke, Davis & Co. ... Cover II
Plainwell Sanitarium ... 658
Professional Management ... 679

Roche Laboratories ... Cover IV

Sammond Pleasant Lodge ... 669
Searle, G. D. & Co. ... 646, 647
Smith, Kline & French Laboratories ... 665
Stratton, Ben P. ... 674
Squibb ... 611
Syntex Laboratories ... 671, 672, 673

Tutag, S. J. & Co. ... 652

Wallace Laboratories ... 600, 655
Winthrop Laboratories ... 598, 602, 663

PROFESSIONAL MANAGEMENT FOR PHYSICIANS AND DENTISTS
since 1932
P.M ®

Professional Management

BLACK AND SKAGGS ASSOCIATES
Battle Creek, Michigan
Affiliated Offices
Battle Creek - - - Detroit
Grand Rapids - - - Saginaw
Traverse City - - - Berkley

"SERVING THE MICHIGAN PHYSICIANS FOR OVER 30 YEARS"

PRESIDENT'S PAGE

Doctors are Citizens

Editor's Note: MSMS President Luther R. Leader, M.D., invited President-Elect C. Allen Payne, M.D., to develop this August message to the membership.

Government is no better or worse than the people who operate it.

People in government are no better or no worse than the people who elect them by the accepted procedures of our political system. Unfortunately, too many governmental trends influence our profession, our business, our personal life and our future security in a dangerously unfavorable manner because too many citizens fail to exercise the duties and obligations of responsible citizenship.

Too many physicians fall into the category of enjoying the privileges of legal citizenship but shirking its responsibilities. They are nonparticipating citizens.

Today it is mandatory that every physician participate in the practical politics of the party of his choice, if he is desirous of helping to mold our country as he thinks best. Active personal participation in politics can take many forms—by being a candidate, a delegate, a party worker, a voter, a financial contributor.

Registering and voting are undoubtedly the prime responsibility of every citizen, but that is not enough. Election campaigns are more and more expensive and must have the financial support of more and more individual citizens, including physicians. Physicians because of their unique position of responsibility in their respective communities can also be helpful in all phases of the process of government. They should become informed, articulate and active in political matters as well as in what happens after the elections.

May I recommend your participation in MDPAC and AMPAC a nonpartisan group of physicians in Michigan, banding together with those throughout the nation to support those ideas and candidates which they as citizens and physicians believe will help to advance and preserve our great nation. This is one way in which we as physicians can partially discharge our duty as responsible citizens.

The time for action is now. Resolve that it is your responsibility participate more in all stages of the process of government. Become i formed and articulate.

The time is short. Your activities in the next three months will be ir portant in deciding the issues and the candidates in November.

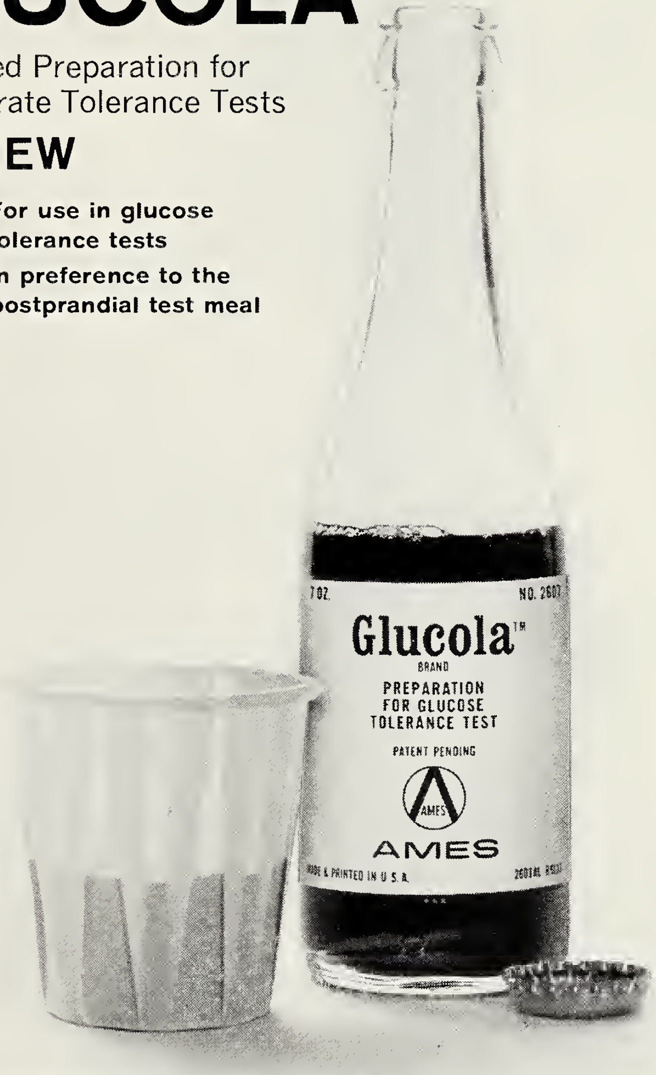
C. Allen Payne, M.

GLUCOLA™

Carbonated Preparation for Carbohydrate Tolerance Tests

NEW

- For use in glucose tolerance tests
- In preference to the postprandial test meal


7 OZ.
NO. 2607
Glucola™
BRAND
PREPARATION FOR GLUCOSE TOLERANCE TEST
PATENT PENDING
AMES
AMES
MADE & PRINTED IN U.S.A.

A NEW SOLUTION FOR AN OLD PROBLEM

Ready to use • Pleasant tasting cola flavor • Well tolerated

A 7-ounce bottle of GLUCOLA provides a liquid oral loading dose equivalent to 75 Gm. of glucose* for carbohydrate tolerance testing. GLUCOLA avoids the nausea that frequently results from lingering sweet laboratory preparations, and the occasional emesis that necessitates rescheduling the test. With GLUCOLA, no time is lost weighing and mixing glucose "cocktails"—only a bottle opener is needed.

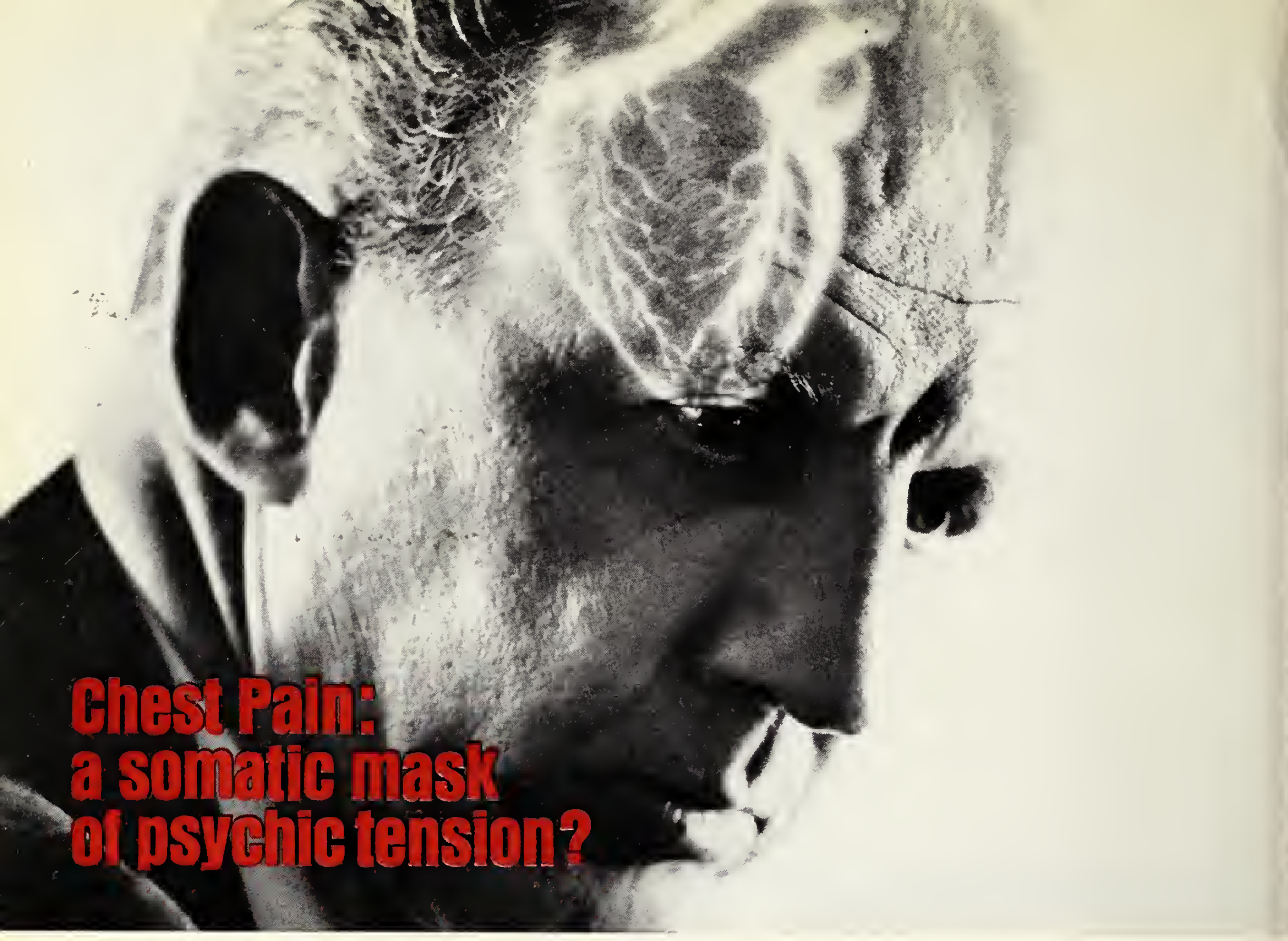
753(R2)64

*The rapidly hydrolyzable saccharides in this formulation assure optimum absorption and glucose levels comparable to those obtained with a 100 Gm. loading dose.

Available through your regular supplier:
cartons of 12 7-oz bottles (6 bottles per pack, 2 packs per carton).

Ames Company, Inc.
Elkhart, Indiana

AMES



"Heart symptoms"—chest pain, tachycardia, arrhythmia—invariably alarm and preoccupy the patient, though they may be completely without organic basis. Such symptoms often are somatic masks of psychic tension, arising from constant encounters with stressful situations.

When the problem is diagnosed as emotionally produced, consider Valium (diazepam) as adjunctive therapy. Valium (diazepam) acts rapidly to calm the patient, to reduce his psychic tension and relieve associated cardiovascular complaints.

NEUROTIC FATIGUE—the chronic tiredness resulting from emotional strain which so often accompanies psychogenic "heart" symptoms—also can be alleviated by this highly useful agent. Valium (diazepam) often achieves results where other psychotherapeutic agents have failed.

Valium (diazepam) is generally well tolerated, and usually does not impair mental acuity or ability to function. If side effects such as ataxia and drowsiness occur, they usually disappear with dosage adjustment.

Contraindications: Infants, patients with history of convulsive disorders or glaucoma.

Warning: Not of value in the treatment of psychotic patients, and should not be employed in lieu of appropriate treatment.

Precautions: Limit dosage to smallest effective amount in elderly patients (not more than 1 mg, one or two times daily) to preclude ataxia or oversedation. Advise patients against possibly hazardous procedures until correct maintenance dosage is established; driving during therapy not recommended. In general, concurrent use with other psychotropic agents is not recommended. Warr patients of possible combined effects with alcohol. Safe use ir pregnancy not established. Observe usual precautions in impaired renal or hepatic function and in patients who may be suicidal; periodic blood counts and liver function tests advisable in long-term use. Cease therapy gradually.

Side Effects: Side effects (usually dose-related) are fatigue drowsiness and ataxia. Also reported: mild nausea, dizziness blurred vision, diplopia, headache, incontinence, slurred speech tremor and skin rash; paradoxical reactions (excitement, depression, stimulation, sleep disturbances and hallucinations) and changes in EEG patterns. Abrupt cessation after prolonged overdosage may produce withdrawal symptoms similar to those seen with barbiturates, meprobamate and chlordiazepoxide HCl.

Dosage — Adults: Mild to moderate psychoneurotic reactions, 2 to 5 mg b.i.d. or t.i.d.; severe psychoneurotic reactions, 5 to 10 mg t.i.d. or q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hrs then 5 mg t.i.d. or q.i.d. as needed; muscle spasm with cerebral palsy or athetosis, 2 to 10 mg t.i.d. or q.i.d. Geriatric patients: 1 or 2 mg/day initially, increase gradually as needed.

Supplied: Tablets, 2 mg, 5 mg and 10 mg; bottles of 50 for convenience and economy in prescribing.

Roche Laboratories Division of Hoffmann-La Roche Inc.
Nutley, N.J. 07110

for somatic symptoms of psychic tension

• 2-mg, 5-mg, 10-mg tablets

Valium®
(diazepam)

ROCHE

AKERS:
s A. Allen, LLB
Altland, MD
a Anderson, MPH
s H. Beaton, MD
rt J. Bloor, MD
Boyce, MD
les G. Child, III, MD
A. Churchill, MD
than O. Cole, MD
hur R. Colwell, Jr., MD
liam W. Coon, MD
enter S. Corssen, MD
ph J. Coskey, MD
rk B. Coventry, MD
yde E. Culp, MD
thur C. Curtis, MD
ul R. Dumke, MD
lair Fearon, MD
tuart M. Finch, MD
. Thomas Flotte, MD
amuel M. Fox, III, MD
ohn W. Goldschmidt, MD
John R. G. Gosling, MD
Russell G. Graff, MD
Paul W. Greeley, MD
John N. Grekin, MD

Ward O. Griffen, Jr., MD
C. William Hall, MD
Garuth Hansen, PhD
Bernard P. Harrison, BSS, JD
Donald W. Hesselschwerdt, MD
Sibley W. Hoobler, MD
William W. Jack, MD
Robert L. Jackson, MD
Jay Jacoby, MD
L. Stanley James, MD
Robert D. Johnson, MD
Henry D. Kaine, MD
George LaCroix, MD
Arnold Lazarow, MD
A. Martin Lerner, MD
Robert S. Levine, MD
Harold I. Lief, MD
Peter A. Martin, MD
John G. Masterson, MD
Rev. Dr. Paul B. McCleave
Beverley T. Mead, MD
Malcolm H. Merrill, MD
Muriel C. Meyers, MD
George W. Morley, MD
Joseph D. Morris, MD
Emily Mudd, PhD
M. Lois Murphy, MD
Reed M. Nesbit, MD
Rev. Gerald B. O'Grady, Jr.
Russell J. Paalman, MD

Roy Patterson, MD
Lawrence Power, MD
William L. Proudfit, MD
Henry Thomas Randall, MD
Francis P. Rhoades, MD
Russell B. Roth, MD
Robert E. Scully, MD
David E. Shoch, MD
Robert G. Siekert, MD
Herbert E. Sloan, MD
Charley J. Smyth, MD
E. Snyderman, MD
D. H. P. Streeter, MD
Sarah C. Stulb MPH
E. Clinton Texter, MD
Jeremiah G. Turcotte, MD
Gladys VandenBelt, MS
Keats K. Vining, Jr., MD
Harry C. Visscher, MD
Robert D. Visscher, MD
Carruth J. Wagner, MD
Robert B. Wallace, MD
Robert H. Wilkinson, MD
Park W. Willis, III, MD
J. Robert Willson, MD
James L. Wilson, MD
Paul V. Woolley, Jr., MD
Chris J. D. Zarafonetis, MD
Herman A. Ziel, MD
Andrew J. Zweifler, MD

SEPTEMBER, 1966 — PUBLISHED MONTHLY

MICHIGAN MEDICINE

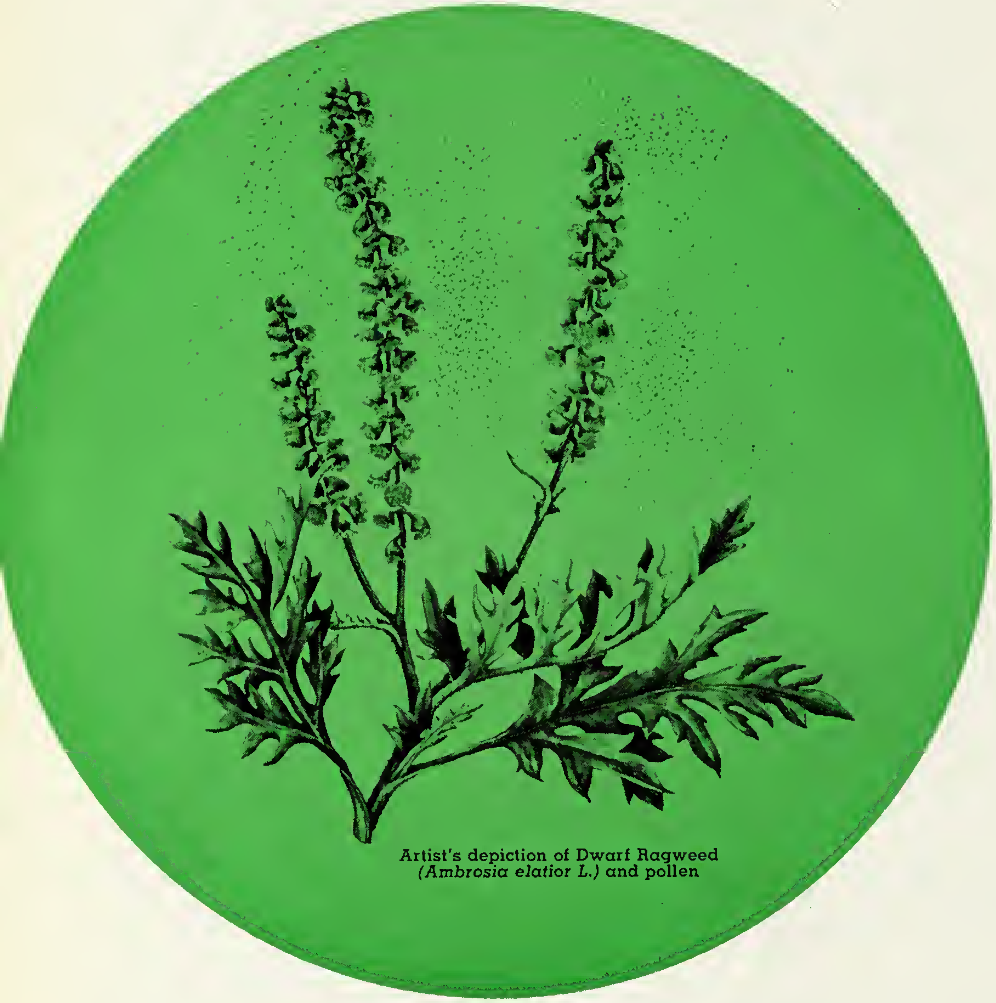
MICHIGAN STATE MEDICAL SOCIETY

xcellent Scientific Refresher Course

Michigan State Medical Society
Grand Rapids . . . See You There!
101st Annual Session, Sep 28-29-30
(No registration fee for MSMS Members, Residents, Int

U.C. MEDICAL CENTER LIBRARY
OCT 7 1966
San Francisco 94122

a sea of trouble for pollen-sensitive patients



Artist's depiction of Dwarf Ragweed
(Ambrosia elatior L.) and pollen

Benadryl®

(diphenhydramine hydrochloride)

PARKE-DAVIS

for control of allergic distress

The pink capsule with the white band is a trademark of Parke, Davis & Company.

PARKE-DAVIS

PARKE, DAVIS & COMPANY, Detroit, Michigan 48232

1866 1966
100th
ANNIVERSARY

00566

- *antihistaminic action* relieves sneezing, nasal congestion, pruritus, and lacrimation
- *antispasmodic action* alleviates bronchial and gastrointestinal spasm.

Precautions: Persons who have become drowsy on this or other antihistamine-containing drugs, or whose tolerance is not known, should not drive vehicles or engage in other activities requiring keen response while using this product. Hypnotics, sedatives, or tranquilizers if used with BENADRYL should be prescribed with caution because of possible additive effect. Diphenhydramine has an atropine-like action which should be considered when prescribing BENADRYL. *Side Effects:* Side reactions, commonly associated with antihistaminic therapy and generally mild, may affect the nervous, gastrointestinal, and cardiovascular systems. Most frequent reactions are drowsiness, dizziness, dryness of the mouth, nausea, and nervousness. BENADRYL is available in Kapseals® of 50 mg. and Capsules of 25 mg.

Lutrexin®

HW&D BRAND OF LUTUTRIN

3000 UNIT TABLETS

IN THE TREATMENT OF FUNCTIONAL DYSMENORRHEA
ID SELECTED CASES OF PREMATURE LABOR AND 2ND
AND 3RD TRIMESTER THREATENED ABORTION

In controlling abnormal uterine activity, LUTREXIN, the non-steroid "uterine relaxing factor" has been found to be the drug of choice by many clinicians.

No side effects have been reported, even when massive doses (25 tablets per day) were administered.

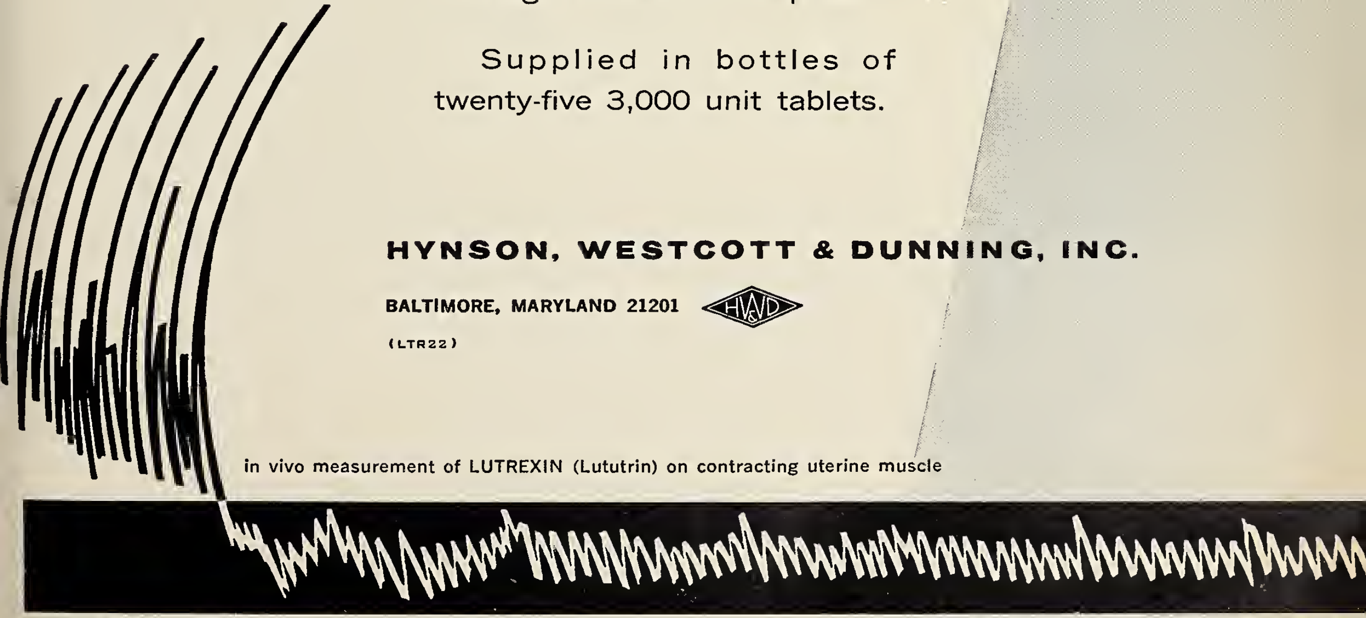
Literature on indications and dosage available on request.

Supplied in bottles of twenty-five 3,000 unit tablets.

HYNSON, WESTCOTT & DUNNING, INC.

BALTIMORE, MARYLAND 21201

(LTR22)



in vivo measurement of LUTREXIN (Lututrin) on contracting uterine muscle

Winthrop announces new

WinGel®

ANTACID TABLETS AND LIQUID

For peptic ulcer, gastric hyperacidity, gastritis

Each WinGel tablet or teaspoon (5 ml.) contains 410 mg. of combined, highly reactive, short polymer, aluminum and magnesium hydroxides **stabilized with hexitol.**

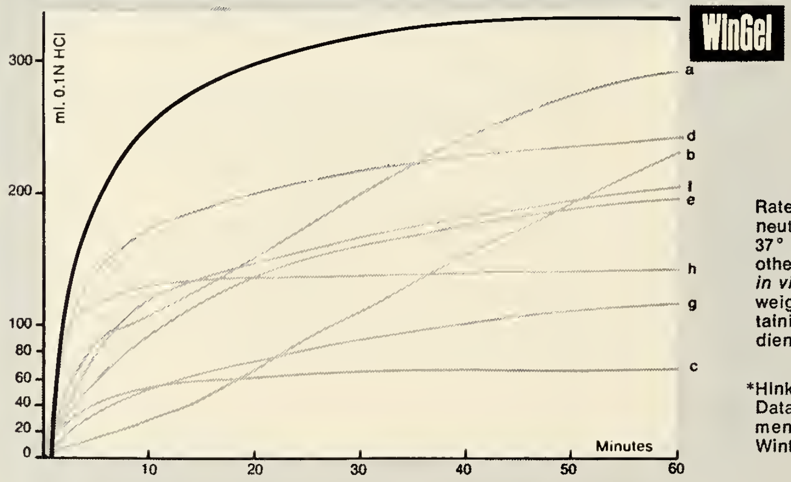
Neutralizes 300 times its active-ingredient weight in gastric acid for fast, long-lasting relief

Gastric or duodenal ulcer, acute or chronic gastritis, gastric hyperacidity...wherever there is "acid overflow" new WinGel can provide faster, longer, more complete neutralization.

In recent laboratory comparisons* with eight other leading antacids, new WinGel tablets not only neutralized more hydrochloric acid per active-ingredient weight, but neutralized it faster and longer than all other antacids tested.

Pleasant pink in color, WinGel is delicately mint flavored with a smooth-as-cream texture—qualities sure to please the patient on long-term therapy. New WinGel is also specially formulated to avoid constipation or diarrhea.

New WinGel neutralizes 300 times its active-ingredient weight in 0.1N hydrochloric acid—neutralizes more acid faster than other leading antacids



Rate of 0.1N hydrochloric acid neutralization at pH 3.5 and 37° with WinGel and eight other leading antacid tablets—*in vitro*. Samples equaled the weight of tablet material containing 1.0 Gm. active ingredients.*

*Hinkel, E. T., Jr. (New York): Data in the files of the Department of Medical Research, Winthrop Laboratories.

Dosage: Peptic ulcer or gastritis—from 2 to 4 teaspoons of WinGel liquid or 2 to 4 tablets chewed or allowed to dissolve in the mouth every two to four hours. **Gastric hyperacidity**—2 tablets or teaspoons about 1/2 to one hour after meals as needed; children from 7 to 14 years of age, 1 or 2 tablets or 1 or 2 teaspoons of liquid as needed.

How Supplied: Liquid in bottles of 8 fl. oz. and 1 pint. **Tablets** in cellophane strips, boxes of 50 and 100. (One teaspoon of WinGel liquid is equivalent to one WinGel tablet in acid-combining capacity.) WinGel, trademark reg. U.S. Pat. Off.

Winthrop Laboratories, New York, N.Y. 10016 Winthrop

Finally — a taste your patients will truly like

(1058M)

SEPTEMBER, 1966
VOLUME 65, NUMBER 9
PUBLISHED MONTHLY BY
MICHIGAN STATE MEDICAL SOCIETY

MICHIGAN MEDICINE

ORIGINAL SCIENTIFIC ARTICLES

713 Current Status of Renal Transplantation/Jeremiah G. Turcotte, M.D., Joseph C. Cerny, M.D., and James A. Greene, M.D.

718 Successful Pregnancies in Patients with Prosthetic Mitral Valves/Aran S. Johnson, M.D., Marjorie Peebles Meyers, M.D., Arthur S. Eckhous, M.D., Burton Bacher, M.D., and Anthony Limia, M.D.

720 The Use of the Intravenous Tolbutamide Test/Feridun Gurol, M.D.

725 Hypofibrinogenemia: Its Diagnosis and Treatment in the Obstetric Patient/Joseph S. Betts, M.D.

SPECIAL ARTICLE

731 Berrien Doctors Provide Care for Migrant Families/Peter Hoheisel

FORUM 685

STATE SOCIETY 688, 693, 694, 696, 697

PERSONAL MENTION 738

BREAKING NEWS 739, 740, 741, 742

VIEWPOINTS 745, 746, 747

ANCILLARY MEETINGS 748

ANCILLARY ACTIVITIES 754, 756, 758, 759, 762, 764

PUBLIC RELATIONS 770, 772, 773, 774

MEDICARE 776, 777

LEGISLATIVE 779, 780, 783

ALSO

705 In Memoriam

790 President's Page

UBLICATION COMMITTEE

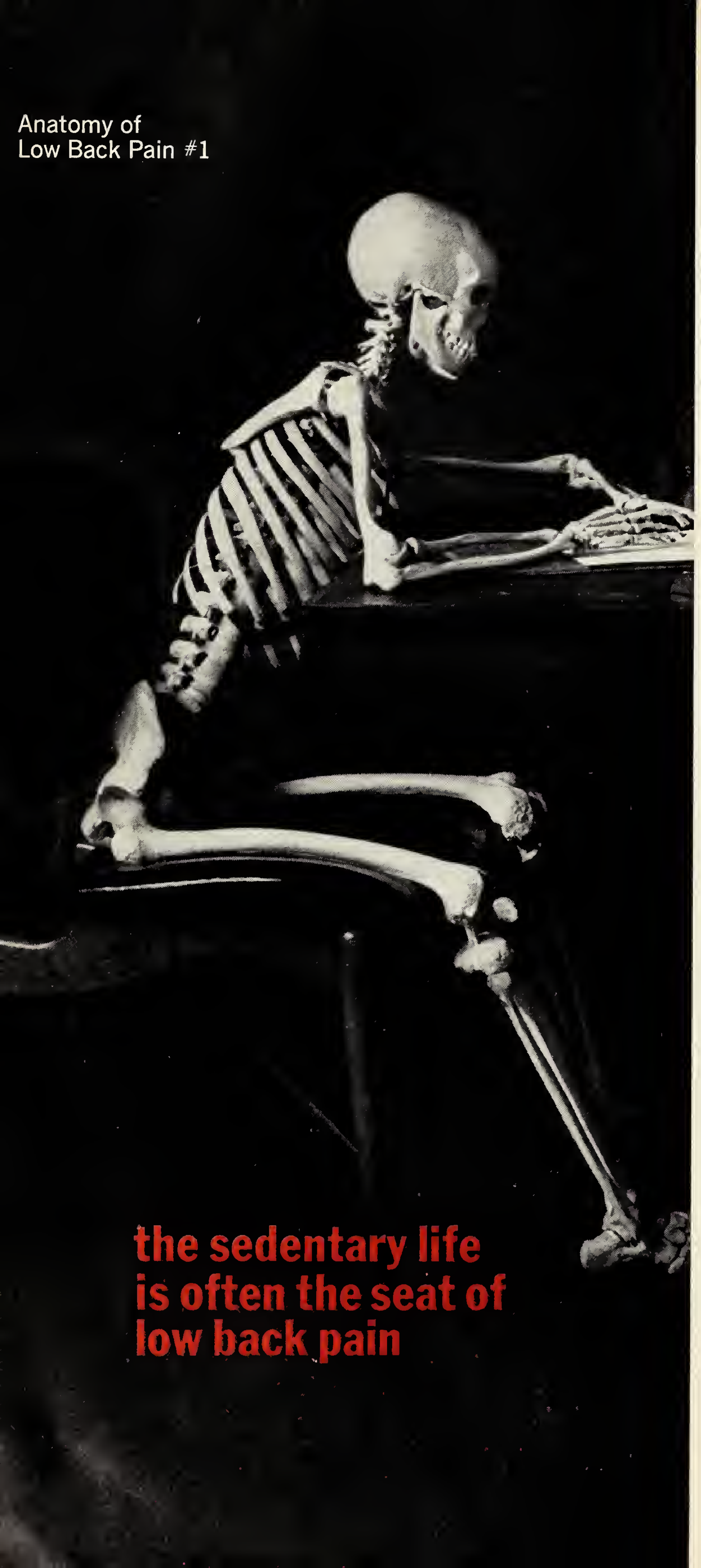
ADLEY M. HARRIS, M.D., Ypsilanti
Chairman
C. HANSEN, M.D., Battle Creek
L. MASTERS, M.D., Fremont
W. MCLEAN, M.D., Detroit
H. RODDA, M.D., Bay City
J. TALLANT, M.D., Detroit
LTON R. WEED, M.D., Grosse Pte. Park

ientific Editor
EORGE H. LOWREY, M.D.

anaging Editor
ERBERT A. AUER

SMS Executive Director and
siness Manager
UGH W. BRENNEMAN

ublished monthly, except two extra issues to be published in October and December, by the Michigan State Medical Society
ts official journal at 2642 University Ave., Saint Paul, Minn. 55114. Second class postage paid at Saint Paul, Minnesota.
rly subscription rate, $9.00; single copies, 80 cents. Additional postage: Canada, $1.00 per year; Pan-American Union,
0 per year; Foreign, $2.50 per year. Printed in USA. All communications relative to manuscripts, advertising, news, ex-
nges, etc., should be addressed to Publication Committee, Michigan State Medical Society, 120 West Saginaw Street, East
sing, Michigan 48824. © 1966 Michigan State Medical Society.



The human spine is not engineered
prolonged sitting at desks, pianos, t
writers and drafting boards. The stre
set up by the heavy, forward-tilted h
and trunk, balanced precariously or
insufficient base, result in strain of
dorsal musculature, particularly at
low lumbar level.

The unusual muscle-relaxant and a
gesic properties of 'Soma' make it e
cially useful in the treatment of low b
sprains and strains. 'Soma' is wi
prescribed ☐ **to relieve pain** ☐ **to r**
muscles ☐ **to restore mobility.**

Indications: 'Soma' is useful for manageme
muscle spasm, pain, and stiffness in a varie
inflammatory, traumatic, and degenerative mu
loskeletal conditions. It also may act to norm
motor activity in certain neurologic disturba

Contraindications: Allergic or idiosyncratic
tions to carisoprodol.

Precautions: 'Soma', like other central ne
system depressants, should be used with ca
in patients with known propensity for takin
cessive quantities of drugs and in patients
known sensitivity to compounds of similar ch
cal structure, e.g., meprobamate.

Side Effects: The only side effect reported wit
frequency is sleepiness, usually on higher
recommended doses. An occasional patient
not tolerate carisoprodol because of an indiv
reaction, such as a sensation of weakness.
rarely observed reactions have included dizzi
ataxia, tremor, agitation, irritability, headach
crease in eosinophil count, flushing of face,
gastrointestinal symptoms.

One instance each of pancytopenia and l
penia, occurring when carisoprodol was ad
istered with other drugs, has been reported, a
an instance of fixed drug eruption with carisop
and subsequent cross reaction to meprobar
Rare allergic reactions, usually mild, have incl
one case each of anaphylactoid reaction with
shock and angioneurotic edema with respir
difficulty, both reversed with appropriate the
In cases of allergic or hypersensitivity react
carisoprodol should be discontinued and appr
ate therapy initiated. Suicidal attempts may
duce coma and/or mild shock and respir
depression.

Dosage: Usual adult dose is one 350 mg. t
three times daily and at bedtime.

Supplied: Two Strengths: 350 mg. white ta
and 250 mg. orange, two-piece capsules.

Before prescribing, consult package circular.

for the relief
of low back
sprains and strai

SOMA
(CARISOPRODO

Wallace Laboratories, Cranbury,

THE FORUM QUESTION THIS MONTH:

What do you see as a major medical-health need which will face the residents of Michigan in 1991 (25 years hence)? And what can the medical profession do now towards the reduction or correction of that need?

arold A. Furlong, M.D.

ontiac

There is every reason to believe that the velocity investigation in all fields of science will accelerate a rate surpassing that of the past decade.

Laboratory and biochemistry methods now unnown will transform the treatment of all disease ntities. The experiences of aerospace medicine, the nployment of computer analytical methodology and e science of biometrics (mathematical analysis of ological facts) will transform the practice of medine. Medical education will foresake the traditional ncepts and embark on new teaching methods. ogramed instruction will be utilized in many areas medical education. The vast scientific knowledge the future cannot be accommodated with the esent curricula.

Specialization in medicine will be even more denitely circumscribed. An entire new area of instigation, the study of chromosomal disease patterns d the eventual ability to manipulate the "genetic de" may completely transform our approach to abetes, certain forms of mental and physical retardaon and eventually may provide the solution to the evention and cure of neoplastic disease.

hn M. Dorsey, M.D.

troit

Thorough cultivation of the medical idea, concern individual human life, is urgently needed now and ways. How I cultivate and conduct my life in my eory and practice of medicine is my only possible ntribution to health. Only by continually discoverg factual evidence of my life's value can I cherish true worth and impel myself to care for it adeately.

How can I renounce soft diversion from the medi- reality of the individual to such distractions as ypnosis," "social pressures," "mass hysterias"? All lp is self-help; conscious self-help is most hygienic. servation is always self-observation.

Fact-finding obviates fault-finding and discloses pert human being. Only by caring insightfully for world, can I contribute to any world peace.

Dr. Furlong

Dr. Dorsey

MEDISCENE

Sept. 12-16—Michigan Nurses Association, Conference for Operating Room Nurses, Kellogg Center, East Lansing

Sept. 25-27—Michigan State Medical Society House of Delegates, Pantlind Hotel, Grand Rapids

Sept. 27-29—Michigan State Medical Society Womans' Auxiliary, Pantlind Hotel, Grand Rapids

Sept. 27-30—Michigan State Medical Society Annual Scientific Session, Civic Center, Grand Rapids

Sept. 28-29—Michigan State Medical Assistants Society Convention, Mr. President Motel, Grand Rapids

Oct. 11-14—Annual Convention, Michigan Nurses Association, Jack Tar Hotel and Civic Center, Lansing

Oct. 16-22—Community Health Week

Oct. 18-19—Annual Convention, American Cancer Society, Michigan Division, Civic Center, Lansing

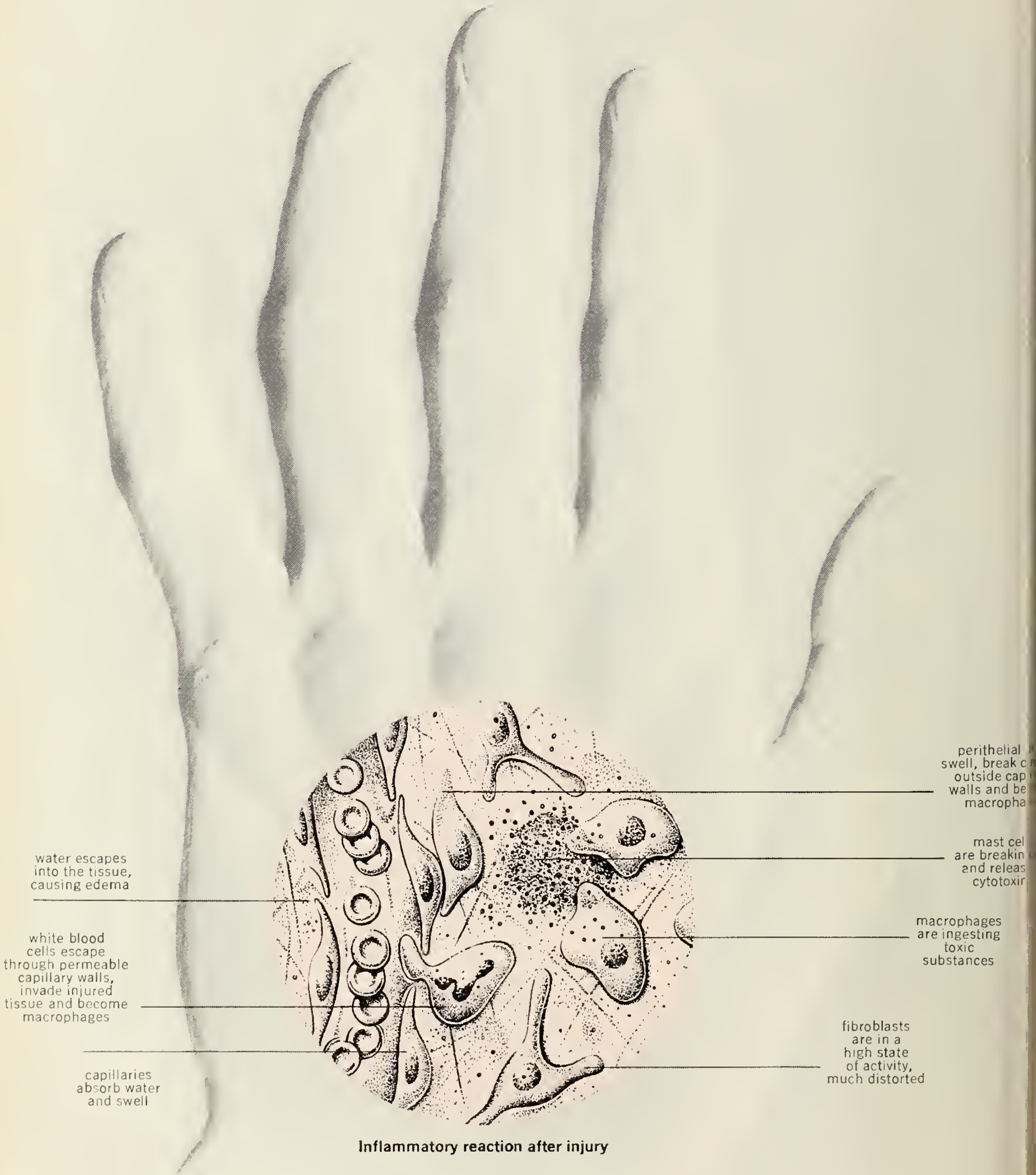
Oct. 19-20—Annual Meeting, Michigan Tuberculosis and Respiratory Disease Association, Kellogg Center, East Lansing

Oct. 20—Annual Meeting, Michigan Thoracic Society, Kellogg Center, East Lansing

Oct. 24-26—School Nursing Workshop, Boyne Mountain Lodge, Boyne Falls

Oct. 27-29—Annual Convention, Michigan Society for Crippled Children and Adults, Inc., Harris Motor Inn, Kalamazoo

Cinemicrography* of living tissue shows that Synalar works at the cellular level to stop the inflammatory chain reaction


water escapes
into the tissue,
causing edema
white blood
cells escape
through permeable
capillary walls,
invade injured
tissue and become
macrophages
capillaries
absorb water
and swell
perithelial
swell, break c
outside cap
walls and be
macropha
mast cel
are breakin
and releas
cytotoxir
macrophages
are ingesting
toxic
substances
fibroblasts
are in a
high state
of activity,
much distorted

Inflammatory reaction after injury

*A New View of Corticosteriod Action in Inflammatory Dermatoses
A 16 mm. film utilizing time-phase cinemicrographic techniques. Available for showing on request to Syntex Laboratories.

In contact dermatitis

Synalar®

(fluocinolone acetonide)

stabilizes cell and capillary walls

protects against the chemical impact of cytotoxins

---

interrupts the chain reaction of destructive changes at the cellular level

---

permits inactivation, absorption and transportation of toxins away from the injured area by natural processes…edema is absorbed and cells return to normal size, shape, and activity

In inflammatory dermatoses choose a steroid synthesized specifically for topical use. Synalar (fluocinolone acetonide) provides therapeutic results often comparable to those of systemic and intralesional corticosteroids with fewer hazards.[1-3]

---

when complicated by infection

neo-synalar®

(fluocinolone acetonide-neomycin sulfate cream)

For initiation of therapy: Cream 0.025%, 5 and 15 Gm. tubes, 425 Gm. jars; **for emollient effect:** Ointment 0.025%, 15 Gm. tubes; **for maintenance therapy:** Cream 0.01%, 15 Gm. tubes, 45 Gm. tubes, 120 Gm. jars; **for intertriginous or hairy sites:** Solution 0.01%, 20 cc. and 60 cc. plastic squeeze bottles; **for infected inflammatory dermatoses:** Neo-Synalar® Cream (0.025% fluocinolone acetonide, neomycin sulfate, equivalent to 0.35% neomycin base), 5 and 15 Gm. tubes.

Contraindications: Tuberculous, fungal, and most viral lesions of the skin, (including herpes simplex, vaccinia, and varicella). Not for ophthalmic use. Contraindicated in individuals with a history of hypersensitivity to any of its components. **Precautions:** Synalar preparations are virtually nonsensitizing and nonirritating. However, the solution may produce burning or stinging when applied to denuded or fissured areas. In some patients with dry lesions, the solution may increase dryness, scaling or itching. The neomycin in Neo-Synalar Cream rarely produces allergic reactions. Prolonged use of any antibiotic may result in overgrowth of nonsusceptible organisms; if this occurs, appropriate therapy should be instituted. Where severe local infection or systemic infection exists, the use of systemic antibiotics should be considered, based on susceptibility testing. While topical steroids have not been reported to have an adverse effect on pregnancy, the safety of their use on pregnant females has not absolutely been established. Therefore, they should not be used extensively on pregnant patients, in large amounts, or for prolonged periods of time. **Side Effects:** Side effects are not ordinarily encountered with topically applied corticosteroids. As with all drugs, however, a few patients may react unfavorably to Synalar under certain conditions.

References: 1. Kanee, B.: Canad Med Ass J 88:999 (May 18) 1963. 2. Scholtz, J. R.: Calif Med 95:224 (Oct.) 1961. 3. Jansen, G. T., Dillaha, C. J., and Honeycutt, W. M.: Arch Derm 92:283 (Sept.) 1965.

fluocinolone acetonide—an original steroid from

SYNTEX

LABORATORIES INC., PALO ALTO, CALIF.

MSMS to Add Fifty Members To 50-Year Club

One of the highlights of the 1966 House of Delegates meeting will be the presentation of the coveted "50-Year Pin" to 50 members of the Michigan State Medical Society.

These physicians will attend the Grand Rapids meeting to receive the pins on Tuesday morning, September 27 before the applauding delegates. The pins will be mailed to the men who are not able to be present.

The Fifty-Year Honorees are:

Alpena County
Harry J. Burkholder, M.D., Alpena

Barry County
Joseph D. Heaslip, M.D., Largo, Fla.

Berrien County
Charles K. Stulik, M.D., Union Pier
Herbert O. Westervelt, M.D., Benton Harbor

Calhoun County
L. D. Funk, M.D., Athens
Orland W. Mitton, M.D., Albuquerque, N. Mexico
Ara D. Sharp, M.D., Albion

Genesee County
Frederick E. Dodds, M.D., Flint
William W. Stevenson, M.D., Flint

Ingham County
David P. Phillips, M.D., Lansing

Kent County
Karl A. Anderson, M.D., Grand Rapids
Ralph V. Allen, M.D., Grand Rapids
Wesley M. Burling, M.D., Grand Rapids
John C. Foshee, M.D., Grand Rapids
Walter J. Jaracz, M.D., Grand Rapids
John J. Miller, M.D., Marne
William R. Vis, M.D., Grand Rapids
Jay D. Vyn, M.D., Grand Rapids
S. Merrill Wells, M.D., Grand Rapids

Lenawee County
Harold Heffron, M.D., Adrian

Muskegon County
Eugene Thornton, M.D., Muskegon

Ottawa County
William Westrate, Sr., M.D., Holland

Wayne County
Thomas G. Amos, M.D., Detroit
Effie Arnold, M.D., Detroit
Lona B. Carroll, M.D., Detroit
Don A. Cohoe, M.D., Detroit
Margarete Coleman, M.D., Royal Oak
Schuyler O. Cotton, M.D., Detroit
Owen C. Foster, M.D., Detroit
Harry H. Goldberg, M.D., Detroit
Winfred B. Harm, M.D., Detroit
Thomas J. Heldt, M.D., Pleasant Ridge
Harold Henderson, M.D., Southfield
Fred L. Honhart, M.D., Grosse Pointe
Arthur Isaacson, M.D., Detroit
Hubert R. John, M.D., Southfield
William H. M. Johnson, M.D., Detroit
Charles E. Lemmon, M.D., Detroit
Traian Leucutia, M.D., Detroit
Charles T. Lewis, M.D., Detroit
Edwin H. Lorentzen, M.D., Detroit
Vincent S. Mancuso, M.D., Ft. Lauderdale, Fla.
Arthur H. Naylor, M.D., Milford
Ralph H. Pino, M.D., Plymouth
Edgar E. Poos, M.D., Detroit
George G. Rieckhoff, M.D., Detroit
Louis D. Stern, M.D., Detroit
Bertrand C. Switzer, M.D., Columbus, Ohio
Charles L. Tomsu, M.D., Detroit
Clair F. Vale, M.D., Winter Park, Fla.

SAMMOND PLEASANT LODGE

Offers to the elderly and chronically ill

Peace and quiet. Freedom of a large and richly furnished home and acres of lawns and wooded rolling grounds, scientifically prepared tasty meals, congenial companionship. A real

"Home away from Home"

Member of Michigan and American Nursing Home Associations. Highly recommended by members of the Medical Profession who have had patients at the Lodge.

For further information write to:

SAMMOND PLEASANT LODGE
124 West Gates Street
Romeo, Michigan
Plateau 2-2591

Doctor,

Here is the Abbott anorectic program designed to meet the individual needs of your overweight patients.

ABBOTT

mood elevation

Abbott
Anorectic
Program

DESOXYN® Gradumet® (methamphetamine hydrochloride)

Smooth appetite control plus mood elevation.

The obese patient on a diet often has to battle depression as well as overweight. Desoxyn Gradumet helps the dieter in both battles by elevating the mood while it curbs the appetite. Thanks to the Gradumet, medication is smoothly released all-day from a single oral dose.

If she can't take plain amphetamine, put her on DESBUTAL® Gradumet

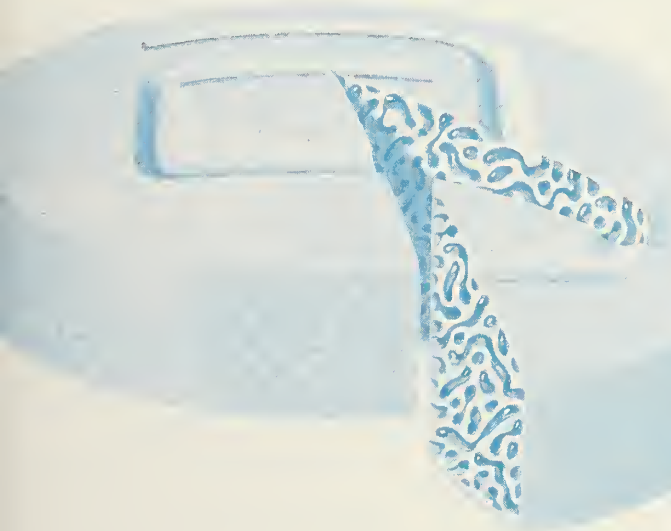
Calms anxieties; controls compulsive eating.

Desbutal Gradumet provides 2 drugs in 2 tablet sections, combined back to back to form a single tablet. One section contains Desoxyn to curb the appetite and lift the mood; the other contains Nembutal® (pentobarbital) to calm the patient and counteract any excessive stimulation.

Both drugs are released in an effective dosage ratio throughout the day.

controlled release

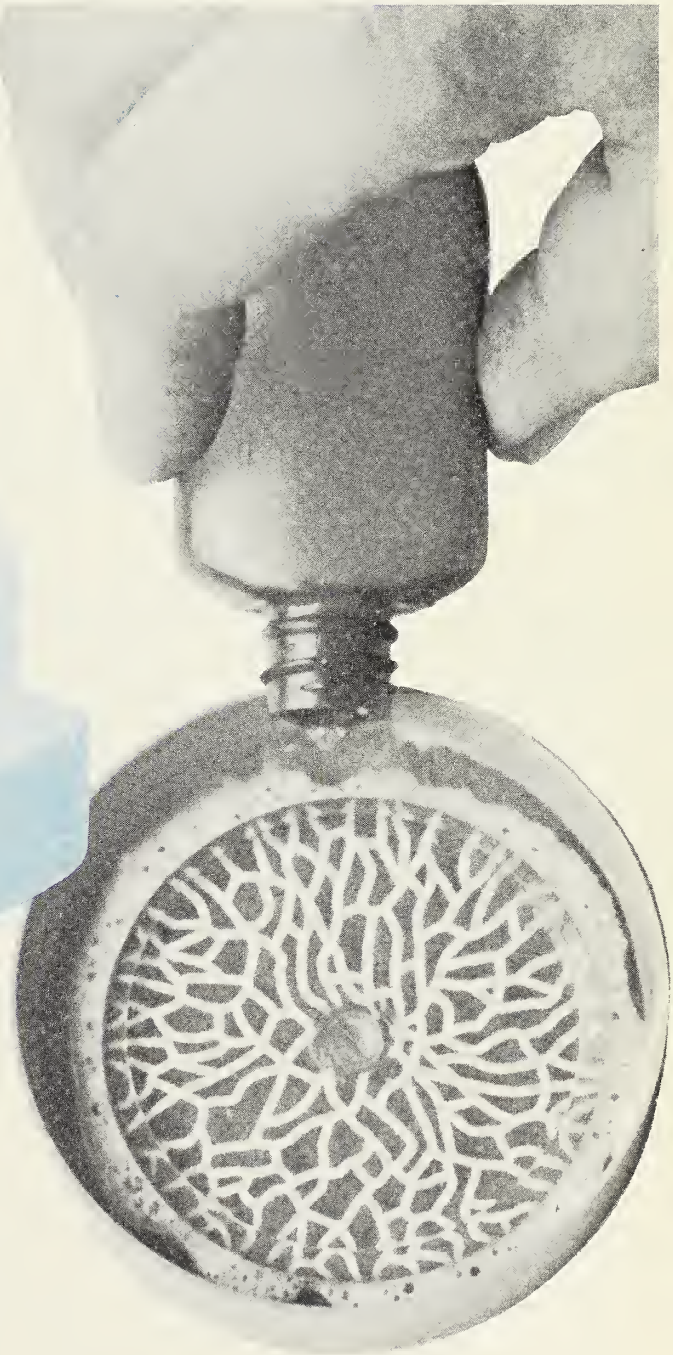
**ot all long-release vehicles are
ne same. Here is why the Gradumet
different and what it means
r your overweight patients.**



ne release action is purely physical and relies on ly one factor common to every patient: gastro-testinal fluid. There is no dependence on enteric atings, enzymes, motility, or an "ideal" ion con-ntration in the gastrointestinal tract.

Your patients get a measured amount of medi-tion, moment by moment, throughout the day. They are not subjected to ups and downs of ug release . . . or to erratic release from patient patient . . . or to erratic release in the same tient from day to day.

hat's why the Gradumet provides ontrolled-release as well as ng release.



Perhaps you saw the Gradumet model demonstration which shows that the release is entirely physical. When fluid is added, the drug in the outer ends of the channels dissolves. As fluid penetrates deeper into the channels, there is a continuous release of medication. The rate of release is rigidly controlled by the size and number of channels.

choice of 5 strengths

Abbot
Anorecti
Progra

DESOXYN Gradumet

Methamphetamine Hydrochloride in Long-Release Dose Form

5 mg. 10 mg. 15 mg.

DESBUTAL 10 Gradumet

10 mg. Methamphetamine Hydrochloride,
60 mg. Pentobarbital Sodium

Front Side

DESBUTAL 15 Gradume

15 mg. Methamphetamine Hydrochloride,
90 mg. Pentobarbital Sodium

Front Side

samples available

Each sample contains 6 tablets and a filled Sucaryl® Sweetener dispenser. For a supply, write Abbott Laboratories or ask your Abbott man.

Desbutal 15 Gradumet

Product of choice for patients who overreact to plain amphetamine

As an anorectic in treatment of obesity, also to counteract anxiety and mild depression

Desbutal is contraindicated in patients taking a monoamine oxidase inhibitor. Nervousness or excessive sedation have occasionally been observed, often these effects will disappear after a few days. Use with caution in patients with hypertension, cardiovascular disease, hyperthyroidism or who are sensitive to sympathomimetic drugs. Careful supervision is advisable with maladjusted individuals

A single Gradumet tablet in the morning provides all-day appetite control

Desbutal 10 contains 10 mg of methamphetamine hydrochloride and 60 mg of pentobarbital sodium. Desbutal 15 contains 15 mg of methamphetamine hydrochloride and 90 mg of pentobarbital sodium. In bottles of 100 and 500

Sucaryl Sweeteners
Brand

A proven aid to weight control—

For use in beverages and foods —stable to heat

A constant reminder to your patient to "watch her calories"

A carefully balanced formula to prevent aftertaste

—in tablets and liquid—

Sucaryl—Abbott brand
of low and non-caloric sweeteners

Press out tablets from this side LOT NO 784 1331

For:

Directions:

Or.

economy

Patients, in many cases, save enough to get five weeks of medication for the price of four, compared to other leading long-release anorectics.

CONTRAINDICATION: Desoxyn and Desbutal ar contraindicated in patients taking a monoamin oxidase inhibitor.
PRECAUTIONS: Use with caution in patients wit hypertension, cardiovascular disease, hyperthy roidism, old age, or those sensitive to sympath mimetic drugs or ephedrine and its derivatives. Careful supervision is advisable with maladjusted individuals.

ABBOTT

Gradumet—long-release dose form, Abbott: U.S. Pat. No. 2,987,44
Sucaryl—Abbott brand of low and non-caloric sweeteners.

601060

Crowds at Fair See Healthmobile

The MSMS Healthmobile was viewed by thousands at the Michigan State Fair in Detroit. The Wayne County Medical Society and its Woman's Auxiliary sponsored the appearance at the fairgrounds.

The Healthmobile began its tour under the sponsorship of Ingham County Medical Society in Lansng, October 15.

The mobile unit then was sponsored consecutively by the Genesee County Medical Society at Flint; Oakland County Society at Pontiac; Jackson County at Jackson; Calhoun at Battle Creek; Branch at Coldwater; Barry at Hastings; Washtenaw at Ann Arbor; Lenawee at Adrian; Wayne at Detroit; Macomb at Mt. Clemens; St. Clair at Port Huron; Sanilac at Marlette; Wayne at Southfield; Saginaw County at Saginaw; Bay-Arenac-Iosco Counties at Bay City; Gratiot-Isabella-Clare Counties at Mt. Pleasant; Mecosta-Osceola-Lake at Big Rapids; Ionia-Montcalm at Greenville; Kent at Grand Rapids; Kalamazoo County at Kalamazoo; Berrien at Benton Harbor; Ottawa at Holland; Muskegon County at Muskegon; Gogebic at Ironwood; Houghton-Baraga-Keweenaw at Houghton; Marquette-Alger at Marquette; Delta-Schoolcraft at Escanaba; Menominee County at Menominee; Dickinson-Iron at Iron Mountain; Chippewa-Mackinac at Sault Ste. Marie; Alpena-Alcona-Presque Isle at Gaylord; North Cenral Medical Society at Gaylord and Grayling; Northrn Michigan Medical Society at Petoskey and Charlevoix; Manistee County at Manistee; Wexford-Missaukee at Cadillac; Ionia-Montcalm at Ionia; Midland County at Midland.

Reception to the Healthmobile has been outstandng. Its authenic exhibits about medical progress and ealth careers have been lauded by educators, health workers, community leaders, communications exerts, and others.

Call to Arms!

". . . a War on General Social Decline can be waged successfully only by aroused citizens—citiens who are willing to do battle in their own lives, their own homes, and their own communities, to evitalize the respect for law and honorable conduct upon which victory depends."

—Governor George Romney

CHRYSLER PROVIDES MEDI-LABELS TO WORKERS

There are many ways in which Medi-Label is being distributed through doctors at work in Michigan.

One of the effective means of getting this small sticker, which contains a person's brief medical history, into circulation is through the plant physicians of the Chrysler Corporation.

Martin F. Bruton, M.D., assistant corporate medical director, repeats that "all of Chrysler Corporation has Medi-Label accessible through its physicians."

Peter Nowosielski, M.D., physician at Mound Road Engine Plant, has already given out 250 of the stickers.

"Out of these 250," says Dr. Nowosielski, "there were 35 people who had special concerns like penicillin sensitivity, allergies, hypertension, diabetes, asthma, and many others—and the proper information about these conditions could be of crucial importance to a person in an emergency."

Doctors who need more of these labels can obtain them from the Michigan State Medical Society in East Lansing.

STAFF PHYSICIAN

An excellent opportunity for a physician is available in the Department of Occupational Medicine at the Midland, Michigan, headquarters of one of the nation's foremost companies.

Relocation expenses
will be paid.
Compensation commensurate
with background.
Comprehensive benefits program.

Phone (517) 636-2243
or write for further information
Benjamin Holder, M.D., Medical Director

Midland Division

THE DOW CHEMICAL COMPANY
P.O. Box 469, Midland, Michigan

An equal opportunity employer

DOW

Say you saw it in Michigan Medicine

MSMS Disability Insurance Now Greatly Improved

Perhaps you are one who has occasionally wondered what might happen to your MSMS disability insurance protection if you left Michigan or if for some reason the MSMS master policy was terminated.

This situation would be especially distressing if it occurred after you could not obtain this type of insurance due to deterioration of health. If you are concerned, you are not alone.

This problem has been under study by the MSMS Committee on Professional Insurance Plans for several months. The committee has now announced that the Group Disability Income Plan underwritten by Provident Life and Accident Insurance Company has been amended to provide a conversion privilege to each practicing insured member under 65 years of age. Conversion from the group coverage to an individual guaranteed renewable policy may be made, if for some reason the master policy should be discontinued by MSMS or the carrier or in the event the insured member should leave Michigan.

The conversion policy will provide the same coverage as the master policy and will be guaranteed renewable to age 70, giving the insured a real equity in the renewal of his insurance.

Why should an individual member be penalized because one of the following conditions should arise?

1. *Termination of Membership:* Heretofore it has been required that membership in MSMS be maintained in order to continue as a participant in the Group Disability Plan. Most cases of this type arise when a member leaves Michigan to practice or accept a position in another state.

2. *Termination of Master Policy:* If the master policy was terminated for whatever reason, each individual participant thereby lost the protection afforded.

The Michigan State Medical Society feels very strongly that any member who has been insured in the sponsored plan should not be penalized, and Provident Life and Accident Insurance Company has accepted this concept. They will now guarantee that a practicing member under the age of 65 can transfer to a policy providing benefits equal to those to which he has subscribed in the group plan.

The MSMS Group Disabilty Plan has always provided quality protection at minimum cost. It has been improved prior to this time to keep pace with needs of the membership. This new and important feature is a "first" in association insurance. The MSMS Committee on Professional Insurance Plans and the carrier deserve a resounding "Well Done" from all of us.

When the problem is only skin deep

USE 'POLYSPORIN'® brand POLYMYXIN B-BACITRACIN OINTMENT

for topical antibiotic therapy with minimum risk of sensitization

Caution: As with other antibiotic products, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs.

Supplied in ½ oz. and 1 oz. tubes.

Complete literature available on request from Professional Services Dept. PML.

BURROUGHS WELLCOME & CO. (U.S.A.) INC.
Tuckahoe, N.Y.

'POLYSPORIN'®
POLYMYXIN B-BACITRACIN
OINTMENT
help prevent infection in
, burns, and abrasions;
aid in healing.

/lost of my patients with
igh blood pressure are
s old as I am. A lot of them
re living on pensions.
'hey're grateful when I can
eep prescription costs
lown.

Regroton®
orthalidone 50 mg. reserpine 0.25 mg.

ablet daily
ings pressure down

vantage: Both components of Regroton
long-acting.
rage dosage: One tablet daily with
akfast.
ntraindications: History of mental
pression, hypersensitivity, and most
es of severe renal or hepatic diseases.
rning: Discontinue 2 weeks before
eral anesthesia, 1 week before electro-
ck therapy, and if depression or
tic ulcer occurs. With administration
nteric-coated potassium supplements,
possibility of small bowel lesions
uld be kept in mind.
cautions: Reduce dosage of con-
nitant antihypertensive agents by one-
. Discontinue if the BUN rises or
r dysfunction is aggravated. Electro-
imbalance and potassium depletion
occur; take particular care in
hosis or severe ischemic heart disease,
in patients receiving corticosteroids,
TH, or digitalis. Salt restriction is not
ommended. Use with caution in
ents with ulcerative colitis, gall-
es, or bronchial asthma.
e effects: Nausea, vomiting, diarrhea,
cle cramps, headaches and dizziness.
ential side effects include angina pecto-
anxiety, depression, drowsiness,
erglycemia, hyperuricemia, lassitude,
kopenia, nasal stuffiness, nightmare,
oura, urticaria, and weakness.
full details, see the complete prescrib-
information.
ilability: Bottles of 100 and 1000 tablets.

eigy

The AMA Medical Library is in use every day by physicians, researchers, science writers, educators, and others.

AMA Library Services Varied

The Medical Library at the AMA Headquarters in Chicago is comprised of an international collection of some 2,200 periodicals on basic medical science and clinical medicine and a comprehensive collection of pamphlets and reprints.

It offers free to members a periodical lending service and package library service.

AMA also "reads" hundreds of foreign medical journals for physicians, abstracting significant articles.

The Association maintains a Medical Film Library of more than 250 subjects and has the largest source file of medical films in the U. S.—more than 7,000 indexed references.

The AMA Department of Investigation has one of the largest collections of nostrums and quack gadgets and medicines in the U. S. and maintains the largest files existent on medical quackery.

AMA's Records Department keeps complete records on all licensed physicians. These information files are begun as soon as a student enters medical school and are kept for some years after a physician's death. These records are the most complete of any profession.

The Association also maintains an extensive library of legal briefs on medicolegal cases plus other medicolegal information and materials.

VOTE AS YOU PLEASE,

BUT PLEASE VOTE NOV. 8

From the Mailbag

The American Medical Association now has a expanded speakers program designed to reach th American people with health information vital t them, to the profession, and to the nation.

To make this program most effective, we hav selected physician-speakers who are competent in particular areas of medicine.

We need your assistance in obtaining platforms fo these speakers at large conventions or meetings in you area. Members of your own speakers bureau shoul have first call on opportunities to appear before interested organizations. But on occasions when a grou in your area expresses interest in obtaining an out-of town speaker, or an AMA representative, we shal appreciate your assistance in directing its officials t the Association's speakers program in Chicago.

Requests should be addressed to Mr. Edward A Uzemack, Director, Officers Services Departmen American Medical Association.

No more effective means of communication exist than person-to-person contact with the community. believe the program outlined here will result in greater utilization of the speech to reach the publi and the profession. Your support of this activity most earnestly solicited.

F. J. L. Blasingame, M.D
Executive Vice President
AMA

We are in the process of distributing "Horizo Unlimited" the AMA booklet among the counselo and libraries of the county. The booklets have received a warm reception from all. The yellow inse concerning educational institutions in Michigan is especial value since informational material is th crying need in the promotion of recruitment. W are always grateful to get helpful materials.

Mrs. Robert H. Fraser,
Health Careers Chairman
Women's Auxiliary to
Calhoun County Medical Socie

We are very grateful to receive the May issue Michigan Medicine in which you printed a list books written by medical doctors who are membe of the Michigan medical schools.

I am directing this copy of your journal to o Archivist who will include it in historical materia pertaining to the American Medical Association a its constituents.

Susan Crawford, *Direct*
AMA Library

Governor Romney

ROMNEY STRESSES ROLE OF EDUCATION

(The following paragraphs are excerpted from the address by Governor George Romney before the 1966 Michigan Conference on Education).

Education succeeds when the student is confronted d challenged by a well-prepared teacher using the st teaching materials at the right time, in the right anner, and the right place.

Education today is being bombarded with the rces of social and economic change. Increasingly, ople are turning to education as the answer to the oblems confronting our complex, urban society—oblems like poverty, delinquency, unemployment, d racial discrimination.

We cannot escape the fact that educational deiency is a distinguishing mark of a large share of ose who fill our correctional institutions, who are our welfare rolls, and who are trapped on the ttom rungs of the economic and social ladder. hen the established educational system fails, some ner public agency must often pick up the pieces.

Sometimes, I fear, educational and political leaders e sight of this basic fact because of their preoccution with the very real problems of educational ucture, administration, finance, and professional tus. Although we must continue to grapple with d ultimately solve these problems, we cannot pert them to absorb all our energies. A symmetrical ucture of consolidated school districts does not ure quality education.

An elaborate, computerized data bank on every ld in the state does not mean that every child will what he needs out of his school experience. School sses which run on time and school lunches served t are not the most accurate yardstick of a successful ool. And even the best school aid formula and the hest teacher salaries lack the magic to transform ucation mediocrity into educational excellence.

The "bread-and-butter" of education has been d always will be what goes on in the classroom. is is where education succeeds or fails.

THE KIDNEY FOUNDATION OF ILLINOIS, INC.
An affiliate of the
National Kidney Foundation

presents the

2ND ANNUAL MEDICAL SYMPOSIUM ON CLINICAL ADVANCES OF RENAL DISEASES

at the

Sheraton-Chicago Hotel
Grand Ballroom
505 North Michigan Avenue
Chicago, Illinois

WEDNESDAY, OCTOBER 5, 1966
from 9:00 am - 5:00 pm

GUEST SPEAKERS

Professor Douglas A. K. Black
Manchester Royal Infirmary
Manchester, England

Dr. Priscilla Kincaid-Smith
Royal Melbourne Hospital
Melbourne, Victoria, Australia

Professor Malcolm D. Milne
Westminster Hospital Medical School
London, England

Professor H. D. De Wardener
Charing Cross Hospital Medical School
London, England

Dr. John T. Grayhack
Northwestern University Medical School
Chicago, Illinois

Professor Jean Hamburger
Clinique Des Maladies Metaboliques
Hospital Necker
Paris, France

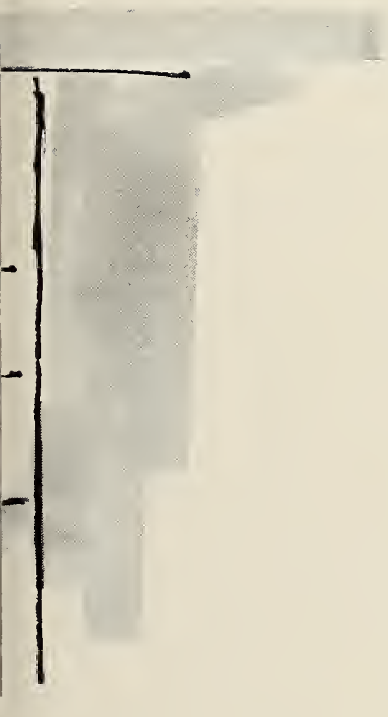
TOPICS INCLUDE

"Disturbances of Renal Concentrating Mechanism"
"Medical and Surgical Aspects of Pyelonephritis"
"Chronic Dialysis and Renal Transplantation"
"Treatment of Chronic Renal Failure"
"Clinical Pharmacology of Diuretics"
"Drug Treatment of Renal Disease"
"Renal Disease in Pregnancy"

REGISTRATION FEE: $15.00 including luncheon, refreshments and other services/$6.00 for students, interns, residents, etc. on presentation of credentials.

Tickets now available from John Lane, Executive Director—Kidney Foundation of Illinois, Inc.—127 North Dearborn Street—Suite 701—Chicago, Illinois 60602.

Say you saw it in Michigan Medicine



Wait, Annabelle. Mommy hasn't told the doctor yet that you *need* a shot.

e she does, maybe she n't. But if her problem is congestion due to cold ergy, consider the medi-n that combines conve-ce and effectiveness—nistine Melet.

et is especially suitable treatment of children. It's asant tasting, chewable that leaves no aftertaste tty, undissolved particles in the mouth. It provides decongestant action almost as quickly as a liquid, but assures the accurate dosage of a tablet.

Because Melets are so convenient to carry and so easy to take at any time, adults, too, will appreciate this modern dosage form.

Use cautiously in individuals with severe hypertension, diabetes mellitus, hyperthyroidism or urinary retention. Caution adults who operate machinery or motor vehicles that drowsiness may occur. Each Melet contains phenylephrine hydrochloride 10 mg. and chlorpheniramine maleate 2 mg.

NOVAHISTINE®
MELET

DOW **PITMAN-MOORE** Division of The Dow Chemical Company, Indianapolis

BOOK RECEIVED

U. S. ARMY IN WORLD WAR II, THE MEDICAL DEPARTMENT MEDICAL SERVICE IN THE MEDITERRANEAN AND MINOR THEATERS. By Charles M. Wiltse. Published by the Office of the Chief of Military History, Department of the Army, Washington, D. C., 1965. $5.00.

The physical format of this volume is excellent. It is well printed, easy to read and reproduction of the photographs is above average. The material covered includes a description of the field medical service in action and then gives an account of medical activities in the Atlantic bases, from Greenland to Brazil, and in Africa and the Middle East. The final material covers the invasion of the Mediterranean, with chapters on Anzio and Southern France. Of interest to the reviewer was the great reliance on civilian help in the preparation of bases early in the war.

A number of interesting and not well known aspects of the war are discussed. The author points out that in the Persian Gulf area the difficult climate and the initially poor living conditions endured by the troops resulted in a very high incidence of psychiatric casualties. At first it was the policy to hospitalize these patients but it was soon found that evacuation of these men resulted in an improved cure rate.

The author's description of the Kasserine withdrawal is an outstanding part of the narrative in this book. Again, it points out the resourcefulness of our enemies during the war and it was only their lack of supplies that prevented an even worse disaster.

In the description of the Anzio beachhead, these same problems arise again. In this engagement many of our hospitals were literally blown to bits during the early part of the fighting.

Although most of the text is very well written, it is unfortunate that in official histories the flow of narrative is often interrupted by lists of personnel and outfits that could be of interest only to the person named or a member of that particular outfit. Many abbreviations are used throughout the text and it is sometimes difficult to trace down the original designation of these although a glossary at the end of the book is quite adequate. It must be admitted that these problems are difficult ones for the official historian to solve to the satisfaction of every reader.

This reviewer must inevitably compare histories of the war to the two masterpieces that have resulted. One is the narrative of the U. S. Navy by Samuel Eliot Morison. This multivolume work has already become a classic and is recognized for its lucidity and beauty of writing. The other is that of Winston Churchill. One cannot expect all authors to reach such heights in writing history. Nevertheless, anyone who undertakes the task of writing such a history must face such comparison. The volume under review falls far short of these other works. The fact that Morison's is an official history and does mention many names, places and outfits, reveals that such a history can be exciting reading. Doctor Wiltse's book is presumed to be very accurately written and undoubtedly would be of interest to those who participated in the campaigns and areas that are mentioned. At times the narrative is very well done but there is seldom any really sustained excitement. It is very easy to put the book down at any time.—George H. Lowrey, M.D.

Recalls Formation Of MSMS PG Plan

Ever wonder how the MSMS postgraduate program developed—and the medical school programs? The following appeared in a recent University of Michigan Catalog about postgraduate members. The roles of MSMS and the U-M are interwoven:

"In 1927 the Board of Regents approved the establishment within the Medical School of a department of Postgraduate Medicine under the usual conditions governing a department of the Medical School. This action was taken in response to an appeal from the Michigan State Medical Society for opportunities for its members to continue their education under academic direction and control.

"The request of the Society was supported by the Wayne State University College of Medicine with the promise of the co-operation of its faculty in the development of a program of teaching. Dr. James D. Bruce was the first director, serving until retirement in 1942, when Dr. Howard H. Cummings was appointed. In 1954 Dr. John M. Sheldon became head of the department.

"The department is unique in that it serves as a liaison for postgraduate activities in the state of Michigan and that the director holds the chairmanship of the Postgraduate Medical Education Committee of the State Medical Society. The Committee is composed of representative members of the Society, the Michigan Department of Health, the Wayne State University College of Medicine, and the University of Michigan Medical School. The above-mentioned organizations co-operate in a twice yearly teaching program in 18 cities located throughout the state, as well as in the correlation of graduate and postgraduate educational opportunities with the state."

A total of 48,500 were killed in 1965 on the nation's highways. In addition, 4,100,000 others were injured in traffic accidents last year.

In Memoriam

James O. Anderson, M.D., Dearborn

James O. Anderson, M.D., Dearborn physician, died July 11 at Mt. Carmel Mercy Hospital where he was a staff member. He was 71 years of age.

A native of Forest, Ontario, Canada, he obtained his medical degree from the University of Toronto Faculty of Medicine in 1922. Doctor Anderson was also a staff member of Oakwood Hospital.

Doctor Anderson was a Life Member of the Michigan State Medical Society.

Milner S. Ballard, M.D., Grand Rapids

Milner S. Ballard, M.D., past president of the Kent County Medical Society, died July 15 at Butterworth Hospital in Grand Rapids. He was 70 years old.

Born in Grand Rapids, Doctor Ballard practiced medicine there from the time of his graduation from the University of Michigan School of Medicine in 1920 until his retirement in 1965.

Charter president of the Michigan Academy of General Practitioners, Doctor Ballard was also a past president of the National Academy of General Practitioners. Doctor Ballard was on the staff of Butterworth, Blodgett Memorial and St. Mary's Hospitals, all of Grand Rapids.

George L. Bond, M.D., Texas

George L. Bond, M.D., 91, former Grand Rapids physician and chief of staff at St. Mary's Hospital for 20 years, died July 9.

Born in North Hector, New York, Doctor Bond was graduated from the University of Michigan School of Medicine. He retired from the active practice of medicine in 1946.

Doctor Bond was a Life Member of the Michigan State Medical Society.

Guy C. Conkle, M.D., Boyne City

Guy C. Conkle, M.D., 88, past president of the Northern Michigan Medical Society, died July 7 at his residence in Boyne City, where he had practiced medicine since 1919.

A graduate of the University of Michigan School of Medicine in 1901, Doctor Conkle was engaged in general practice for 54 years. His hospital affiliations included Lockwood and Little Traverse Hospitals of Petoskey and Charlevoix Hospital, Charlevoix.

Doctor Conkle served in the Medical Corps during World War I.

A Life Member of the Michigan State Medical Society, Doctor Conkle received its 50-Year Award in 1951.

D. V. Estill, M.D., Washington, D.C.

Donald V. Estill, M.D., former Kalamazoo physician and surgeon, died May 7 in Walter Reed Army Hospital in Washington. He was 70.

Doctor Estill received his medical degree from Howard University and opened his practice in Kalamazoo in 1947. He remained there until 1965 when he moved to Washington. Prior to starting practice in Kalamazoo, Doctor Estill served in the Army as a medical officer.

Doctor Estill was a retired member of the Michigan State Medical Society.

Landon Lapham, M.D., Whitehall

Landon Lapham, M.D., Whitehall general practitioner, died July 12 at his residence. He was 56.

Doctor Lapham was born in Lake Wilson, Minnesota, and was graduated from the University of Marquette Medical School in 1943. He interned at Highland Park General Hospital, Highland Park, and practiced one year at Balsam Lake, Wisconsin, before coming to Whitehall in 1948. A director of the proposed White Lake Hospital, Doctor Lapham was affiliated with Hackley and Mercy hospitals of Muskegon. He was a member of the American Academy of General Practice.

Doctor Lapham served in the army from 1944-1946.

Howard C. Lavender, M.D., Kalamazoo

Howard C. Lavender, M.D., Kalamazoo physician and surgeon, died June 20 in Bronson Hospital at age 62. He was a past vice president of the Kalamazoo Academy of Medicine.

Born in Nashville, Tennessee, Doctor Lavender received his medical degree from Vanderbilt University Medical School in 1932. He interned at Cincinnati

General Hospital and was a surgical fellow at Henry Ford Hospital in Detroit for four years. Doctor Lavender came to Kalamazoo in 1937 and practiced surgery there until 1951 when failing eyesight forced him from the profession. He became a health educator with the Kalamazoo City-County Health Department in 1952 and four years later re-entered private practice doing physical examinations and consultations.

Doctor Smith was on the staffs of Borgess and Bronson hospitals, Kalamazoo, and served on the Michigan Selective Service System Advisory Board. His medical memberships included the American College of Surgeons, the American Board of Surgery, the Association of Railway Surgeons and Phi Beta Pi medical fraternity.

Doctor Smith was an associate member of the Michigan State Medical Society.

W. Thomas Love, M.D., Detroit

W. Thomas Love, M.D., an assistant Wayne County medical examiner for more than 30 years, died July 26 at Hutzel Hospital. He was 64.

A Detroit resident since 1933, Doctor Love was born in Waynesville, N. C., and received his doctor of medicine degree from the University of Michigan in 1930. Doctor Love maintained a private practice and was on the staff of Hutzel Hospital, and was affiliated also with Woman's and Detroit General. Doctor Love was a founder of the Seminar Society and a member of Omega Psi Phi professional fraternity and Sigma Pi Phi Boule professional society.

O. M. Randall, M.D., Lansing

O. M. Randall, M. D., Past President of the Ingham County Medical Society, died August 8 at age 77.

A native of Lansing, Doctor Randall received his medical degree from the Wayne State University School of Medicine in 1915 and interned at Harper Hospital in Detroit. Doctor Randall practiced surgery in Lansing for 48 years and was a former chief of staff of both Sparrow and St. Lawrence hospitals of that city.

During World War I Doctor Randall served as a captain in the Army Medical Corps.

Doctor Randall received the Fifty Year Award from the Michigan State Medical Society in 1965 and was a Retired Member.

(Continued on Page 709)

INGRAM'S SERVICE DEPARTMENT

ALL FACTORY TRAINED MEN

We service Medical Equipment, Electrocardiographs, Basal Metabalors, Sterilizers, Autoclaves, Diathermy Outfits, Cutting Units, Ultra Violet Lamps, Hydro Therapy Units, Laboratory Equipment. ALL BURDICK, LIEBEL FLARSHEIM AND RITTER EQUIPMENT.

If you have any Service problems, please call us at TE 2-4444, ask for the SERVICE DEPARTMENT and we will gladly help in any way we can.

THE G. A. INGRAM COMPANY

4444 Woodward Avenue TEmple 2-4444 Detroit, Michigan 48201

Paregoric
Belladonna
Aspirin
Digitalis
Codeine
Penicillin
Miltown®

An eminent role in medical practice

- Clinicians throughout the world consider meprobamate a therapeutic standard in the management of anxiety and tension.
- The high safety-efficacy ratio of 'Miltown' has been demonstrated by more than a decade of clinical use.

Miltown®
(meprobamate)

Indications: Meprobamate is effective in relief of anxiety and tension states. Also as adjunctive therapy when anxiety may be a causative or otherwise disturbing factor. Although not a hypnotic, meprobamate fosters normal sleep through both its anti-anxiety and muscle-relaxant properties.

Contraindications: Previous allergic or idiosyncratic reactions to meprobamate or meprobamate-containing drugs.

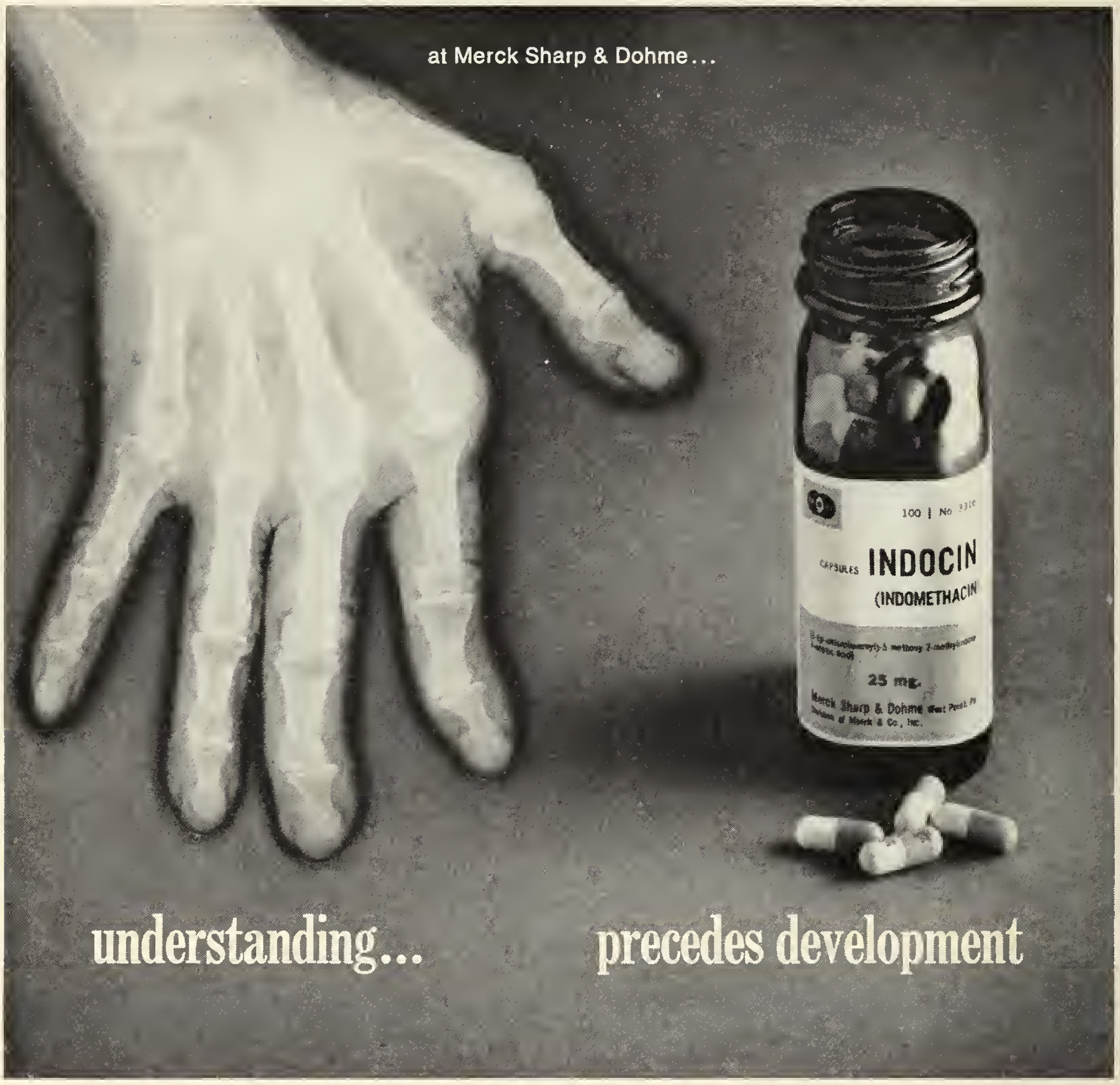
Precautions: Careful supervision of dose and amounts prescribed is advised. Consider possibility of dependence, particularly in patients with history of drug or alcohol addiction; withdraw gradually after use for weeks or months at excessive dosage. Abrupt withdrawal may precipitate recurrence of pre-existing symptoms, or withdrawal reactions including, rarely, epileptiform seizures. Should meprobamate cause drowsiness or visual disturbances, the dose should be reduced and operation of motor vehicles or machinery or other activity requiring alertness should be avoided if these symptoms are present. Effects of excessive alcohol may possibly be increased by meprobamate. Grand mal seizures may be precipitated in persons suffering from both grand and petit mal. Prescribe cautiously and in small quantities to patients with suicidal tendencies.

Side effects: Drowsiness may occur and, rarely, ataxia, usually controlled by decreasing the dose. Allergic or idiosyncratic reactions are rare, generally developing after one to four doses. Mild reactions are characterized by an urticarial or erythematous, maculopapular rash. Acute nonthrombocytopenic purpura with peripheral edema and fever, transient leukopenia, and a single case of fatal bullous dermatitis after administration of meprobamate and prednisolone have been reported. More severe and very rare cases of hypersensitivity may produce fever, chills, fainting spells, angioneurotic edema, bronchial spasms, hypotensive crises (1 fatal case), anuria, anaphylaxis, stomatitis and proctitis. Treatment should be symptomatic in such cases, and the drug should not be reinstituted. Isolated cases of agranulocytosis, thrombocytopenic purpura, and a single fatal instance of aplastic anemia have been reported, but only when other drugs known to elicit these conditions were given concomitantly. Fast EEG activity has been reported, usually after excessive meprobamate dosage. Suicidal attempts may produce lethargy, stupor, ataxia, coma, shock, vasomotor and respiratory collapse.

Usual adult dosage: One or two 400 mg. tablets three times daily. Doses above 2400 mg. daily are not recommended.

Supplied: 'Miltown' (meprobamate) is available in two strengths: 400 mg. scored tablets and 200 mg. coated tablets. 'Meprotabs' (meprobamate) is available as 400 mg. white, coated, unmarked tablets. *Before prescribing, consult package circular.*

WALLACE LABORATORIES
Cranbury, N.J.
CM-7814


at Merck Sharp & Dohme...
100 | No 3316
CAPSULES INDOCIN
(INDOMETHACIN)
25 mg.
Merck Sharp & Dohme West Point, Pa.
Division of Merck & Co., Inc.
understanding...
precedes development

The synthesis of cortisone was accomplished by Merck Sharp & Dohme in 1948—the famous "Compound E" used by Dr. Philip Hench in his historic experiment at the Mayo Clinic.

But proud as we are of our role in the development of cortisone and subsequent corticosteroids, we have continued to seek a greater understanding of arthritic disorders and new drugs for their treatment.

One such drug—INDOCIN® (indomethacin), a nonsteroid, anti-inflammatory agent fundamentally different in structure and activity from other drugs in use—was recently made available for the treatment of arthritic conditions. It opens new possibilities for the long-term management of arthritis and inflammatory disease.

MERCK SHARP & DOHME | **where today's theory is tomorrow's therapy**
Division of Merck & Co., INC., West Point, Pa.

INDOCIN®

INDOMETHACIN

Indications: Chronic and acute rheumatoid arthritis, rheumatoid (ankylosing) spondylitis, degenerative joint disease (osteoarthritis) of the hip, and gout.
Contraindications: Active peptic ulcer, gastritis, regional enteritis, or ulcerative colitis. Safety in pregnancy has not been established. Not recommended for pediatric age groups.
Warning: Patients who experience dizziness, lightheadedness, or feelings of detachment on INDOCIN should be cautioned against operating motor vehicles, machinery, climbing ladders, etc. Use cautiously in patients with psychiatric disturbances, epilepsy, or parkinsonism.
Precautions and Adverse Reactions: Most commonly, headache, dizziness, lightheadedness, G.I. disturbances. The C.N.S. effects are often transient and frequently disappear with continued treatment or reduced dosage. The severity of these effects may occasionally require cessation of therapy. G.I. effects may be minimized by giving the drug with food or with antacids or immediately after meals. Ulceration of the stomach, duodenum, or small intestine has been reported and, in a few instances, severe bleeding with perforation and death. Gastrointestinal bleeding with no obvious ulcer formation has also been noted; INDOCIN should be discontinued if G.I. bleeding occurs. As a result of G.I. bleeding, some patients may manifest anemia, and for this reason periodic hemoglobin determinations are recommended. Rare reports of effects not definitely known to be attributable to INDOCIN include bleeding from the sigmoid colon (either from a diverticulum or without a known previous pathologic condition), perforation of preexisting sigmoid lesions (diverticulum, carcinoma), and hematuria. In other rare cases, a diagnosis of gastritis has been made while the drug was being given. One patient developed ulcerative colitis, and another, regional ileitis, while receiving INDOCIN; when the drug was given to patients with preexisting ulcerative colitis, there was an increase in abdominal pain. Infrequently observed side effects may include drowsiness, tinnitus, mental confusion, depression and other psychic disturbances, blurred vision, stomatitis, pruritus, edema, and hypersensitivity reactions. Slight BUN elevation, usually transient, has been seen in some patients, although the preponderance of evidence indicates that INDOCIN does not adversely affect renal function, even in patients with preexisting renal disease. Nevertheless, renal function should be checked periodically in patients on long-term therapy. Leukopenia has been seen in a few patients. Transient elevations in alkaline phosphatase, cephalin-cholesterol flocculation, and thymol turbidity tests have been observed in some patients and, rarely, elevations of SGOT values; the relationship of these changes to the drug, if any, has not been established. As with any new drug, patients should be followed carefully to detect unusual manifestations of drug sensitivity. Before prescribing or administering, read product circular with package or available on request.

H. Walter Reed, M.D., Detroit

H. Walter Reed, M.D., 76, a Detroit physician for 50 years, died June 28 at his home.

Born in Brinkhaven, Ohio, Doctor Reed was graduated from the Western Reserve College of Medicine in 1911. In 1936 Doctor Reed took postgraduate work in Vienna. He was affiliated with Providence and Brent Hospitals, both of Detroit.

During World War I Doctor Reed served with the Army Medical Corps.

A Life Member of the Michigan State Medical Society, Doctor Reed received its 50-Year Award in 1961.

Among the survivors is a brother, John A. Reed, M.D.

Franklyn Rice, M.D., Marquette

Franklyn Rice, M.D., 56, former Niles physician, died May 31 in Marquette.

Born in Cleveland, Ohio, Doctor Rice was graduated from Ohio State University School of Medicine in 1939. Doctor Rice served as Health Officer for the City of Niles from 1947 to 1950 and was Berrien County Coroner from 1952 to 1954. He was a member of the American Association of General Practitioners and the Michigan Chapter of the American Society of Clinical Hypnosis. His medical fraternity was Phi Chi.

During World War II Doctor Rice served as a surgeon in the European Theatre of Operations and following an injury was placed in command of a 1,500-bed hospital for German prisoners of war at Lison, France.

Orville Roeglin, M.D., Detroit

Orville Roeglin, M.D., 46, Detroit physician for 15 years, died July 4 at his home

Born in Detroit, Doctor Roeglin received his medical degree from the University of Michigan School of Medicine in 1947. Doctor Roeglin was affiliated with Deaconess Hospital, Detroit, and was engaged in general practice and obstetrics and gynecology. His medical fraternity was Phi Chi.

W. Joel Smith, M.D., Cadillac

W. Joel Smith, M.D., former Delegate to MSMS, died July 7, at Mercy Hospital, Cadillac, where he was chief of staff when that institution was dedicated in 1908, a position he held for 35 years. He was 84.

A native of Portland, Doctor Smith was graduated from Rush Medical College in 1905. He came to Cadillac in 1906 and practiced there for 60 years.

A Fellow of the American College of Surgeons, Doctor Smith's medical fraternity was Phi Rho Sigma. He served with Selective Service for 20 years.

Doctor Smith was a Life Member of the Michigan State Medical Society.

David Sugar, M.D., Detroit

David Sugar, M.D., Past President of the Wayne County Medical Society and long prominent in the publication of the Detroit Medical News, died July 4 in Providence Hospital, Southfield, at the age of 71.

Doctor Sugar recently completed five years as a member of the WCMS Board of Trustees, the last two years as Chairman. Prior to that, he was President. His first and continuing interest was always the Detroit Medical News, serving as Editor from 1933 to 1937 and again from 1958 to 1959. In addition, he served many years as Associate Editor.

A native of Chicago and a graduate of the University of Michigan School of Medicine in 1921, Doctor Sugar began the practice of medicine in Detroit in 1922 after interning at Harper Hospital. He became a specialist in internal medicine, keenly interested in cardiology.

He was an instructor in internal medicine at WSU and was senior attending physician at Delray General and associate attending physician at Detroit General.

Doctor Sugar was a member and Past President of the Detroit Physiological Society and a Life Member of the Michigan State Medical Society.

Ivan B. Taylor, M.D., Detroit

Ivan B. Taylor, M.D., 59, Detroit anesthesiologist, died July 20.

A native of Jackson County, Doctor Taylor was graduated from the University of Michigan School of Medicine in 1932 and served his internship at Wise General Hospital, Madison. He then spent four years at the University of Wisconsin doing clinical anesthesia, teaching and research.

In 1938 Doctor Taylor was appointed first Professor of Anesthesiology at the University of Pennsylvania where he remained until 1940 when he was appointed to the same professorship at Wayne State University. Doctor Taylor was a founding member of the Detroit Surgical Association and a member of many medical organizations. At the time of his death Doctor Taylor was Chief of Anesthesiology at Receiving, Children's and Jennings Hospitals, anesthesiologist to the Hutzel and Harper Hospitals, and consultant to the Veterans and United States Public Health Hospitals.

During World War II, Doctor Taylor served f three years in the European theatre as a member the 36th General Hospital.

Harold A. Tucker, M.D., Pago Pago

Harold A. Tucker, M. D., former Kalamazoo ph sician, died in Pago Pago, American Samoa, whe he was Medical Director of the American Hospit He was 50 years old.

Doctor Tucker was graduated from the Universi of Southern California School of Medicine in 194 He was a staff physician for the Panama Canal Cor pany from 1949 to 1951 and was with the Wor Health Organization in Rangoon, Burma, from 19 to 1955. Doctor Tucker then joined the Upjohn Cor pany in Kalamazoo as staff physician and medi writer and remained in this post until June of 19 when he left for Pago Pago to become Medical D rector of the American Hospital there. Doctor Tuck authored several medical books and was a fellow the American College of Physicians.

Following his graduation from Medical Scho Doctor Tucker served as a captain in the Army Me cal Corps in Germany.

Doctor Tucker was an associate member of t Michigan State Medical Society.

Peter L. Warner, M.D., Detroit

Peter L. Warner, M.D., 76, retired physician, di July 25 in Edgewater Convalescent Home.

A 1921 graduate of Wayne State University Sch of Medicine, Doctor Warner was a general prac tioner in the Detroit area for 45 years, retiring 1960. Doctor Warner was an original staff memb of Mt. Carmel Hospital. His medical fraternity w Phi Beta Pi.

Doctor Warner was a Life Member of the M chigan State Medical Society.

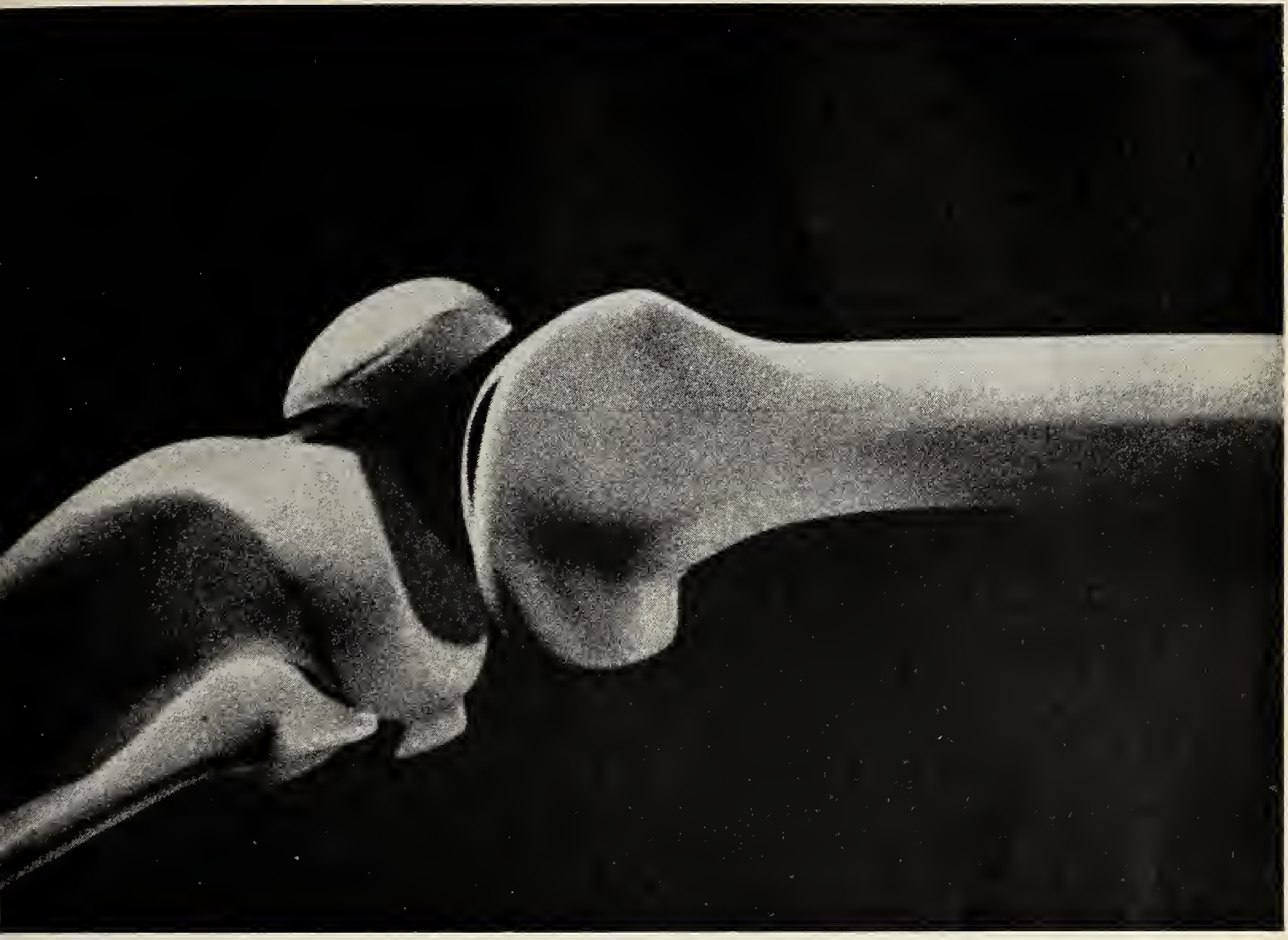
William E. Wilson, M.D., Grand Rapids

William E. Wilson, M.D., 75, retired surgeon fr Grand Rapids, died July 12 at his home there.

Doctor Wilson was born in Pulaski, Tenn., and w graduated from Vanderbilt University School Medicine in 1914. That year he came to Gra Rapids as resident surgeon at Butterworth Hospit He was a fellow of the American College of Surgeo Doctor Wilson retired in 1932.

During World War I Doctor Wilson served as surgeon with the Army and won two Silver St and two Purple Hearts.

Doctor Wilson was a retired member of the M chigan State Medical Society.



utazolidin® alka

nylbutazone, 100 mg.
d aluminum hydroxide gel, 100 mg.
gnesium trisilicate, 150 mg.
natropine methylbromide, 1.25 mg.

Usually works within 3 to 4 days in osteoarthritis

trial period need not exceed 1 week. In
trast, the recommended trial period for
ometacin is *at least 1 month.*

t's why it's logical to start therapy with
azolidin alka—you'll know quickly whether
ot it works. And usually, it will.

rge number of investigators have re-
ted major improvement in about 75% of
es. Some patients have gone into remis-
. Relief of stiffness and pain may be
owed quickly by improved function and
olution of other signs of inflammation. And
azolidin alka is well tolerated, especially
e it contains antacids and an antispas-
dic to minimize gastric upset.

traindications
ma; danger of cardiac decompensation;
ory or symptoms of peptic ulcer; renal,
atic or cardiac damage; history of drug
rgy; history of blood dyscrasia. Because
e increased possibility of toxic reactions,
drug should be used with greater care in
elderly and should not be given when the
ent is senile or when other potent chemo-
apeutic agents are given concurrently.
e doses of Butazolidin alka are contra-
cated in patients with glaucoma.

ning
oumarin-type anticoagulants are given
ltaneously, the physician should watch
xcessive increase in prothrombin time.

Pyrazole compounds may potentiate the pharmacologic action of sulfonylurea, sulfonamide-type agents and insulin. Patients receiving such concomitant therapy should be carefully observed for this effect.

Use with caution in the first trimester of pregnancy.

Precautions
Before prescribing, the physician should obtain a detailed history and perform a complete physical and laboratory examination, including a blood count. The patient should be kept under close supervision and should be warned to report immediately fever, sore throat, or mouth lesions (symptoms of blood dyscrasia); sudden weight gain (water retention); skin reactions; black or tarry stools. Regular blood counts should be made to guard against blood dyscrasias.

Adverse Reactions
The most common adverse reactions are nausea, edema and drug rash. Moderately lowered red cell count may sometimes occur due to hemodilution. The drug has been associated with peptic ulcer and may reactivate a latent peptic ulcer. Infrequently, agranulocytosis, exfoliative dermatitis, Stevens-Johnson syndrome or a generalized allergic reaction may occur and require withdrawal of medication. Stomatitis, salivary gland enlargement, vertigo or languor may occur. Leukemia and leukemoid reactions have been reported but cannot definitely be attributed to the drug. Thrombocytopenic purpura and aplastic anemia are also possible side effects.

Confusional states, hyperglycemia, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hepatitis, jaundice and several cases of anuria and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently.

Dosage
The initial daily dosage in adults is 300-600 mg. daily in divided doses. In most instances, 400 mg. daily is sufficient. When improvement occurs, dosage should be decreased to the minimum effective level: this should not exceed 400 mg. daily, and is often achieved with only 100-200 mg. daily.

For complete details, please refer to full prescribing information.
6509-V(B)

Also available: Butazolidin®, phenylbutazone Tablets of 100 mg.

Geigy Pharmaceuticals
Division of Geigy Chemical Corporation
Ardsley, New York BU-3804R

Geigy

good reason
to select
Ilosone®
Erythromycin Estolate
for bacterial
infections

94 6 8↑ 100 2 4 6 8

two to four times
the therapeutic
activity of other
erythromycins

CONTRAINDICATIONS: Ilosone is contraindicated in patients with a known history of sensitivity to this drug and in those with preexisting liver disease or dysfunction.

SIDE-EFFECTS: Even though Ilosone is the most active oral form of erythromycin, the incidence of side-effects is low. Infrequent cases of drug idiosyncrasy, manifested by a form of intrahepatic cholestatic jaundice, have been reported. There have been no known fatal or definite residual effects. Gastro-intestinal disturbances not associated with hepatic effects are observed in a small proportion of patients as a result of a local stimulating action of Ilosone on the alimentary tract. Although allergic manifestations are uncommon with the use of erythromycin, there have been occasional reports of urticaria, skin eruptions, and, on rare occasions, anaphylaxis.

DOSAGE: *Children under 25 pounds*—5 mg. per pound of body weight every six hours. *Children 25 to 50 pounds*—125 mg. every six hours. *Adults and children over 50 pounds*—250 mg. every six hours. For severe infections, these dosages may be doubled.

Available in Pulvules®, suspension, drops, and chewable tablets. Ilosone Chewable tablets should be chewed or crushed and swallowed with water.

Additional information available to physicians upon request.
Eli Lilly and Company, Indianapolis, Indiana 46206.

Lilly

600541

CURRENT STATUS OF RENAL TRANSPLANTATION

ORIGINAL SCIENTIFIC ARTICLE

By

Jeremiah G. Turcotte, M.D.
Joseph C. Cerny, M.D.
James A. Greene, M.D.

All of Ann Arbor

The results of over 700 cases of human renal transplantation performed throughout the world are available for evaluation.[1] The follow-up of these cases is too brief to permit a reliable prognosis beyond two years, and detailed descriptions of complications associated with transplantation have not been published. Nevertheless, the benefit which some patients have derived from this procedure has been impressive to us. Today physicians who manage patients with advanced renal disease should regard transplantation as one alternative available for treatment.

In this article we consider the current status of renal transplantation by organizing results reported from the Human Kidney Transplant Registry and other individual series.[1,2,3] Survival and morbidity statistics are analyzed in relation to experience at the University of Michigan.

MATERIALS AND METHODS

The most complete tabulation of results in renal transplantation is kept by the Human Kidney Transplant Registry.[1] Nearly all groups in the world performing human transplants have cooperated with the registry, so that a significant number of cases has been accumulated. The last report of the registry included 717 transplants performed before March 1965. Results are reported as the number of transplanted kidneys continuing to function. The exact number of patients surviving is not tabulated. This convention will be followed in this analysis, but it should be understood that the number of patients surviving may be slightly greater than the number of functioning transplants, since some patients are returned to chronic dialysis programs or receive second transplants.

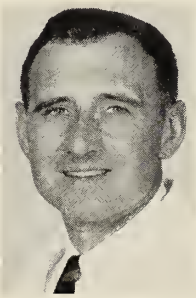
The 45 second transplants which were included in the total of 717 transplants considered by the registry are not analyzed in this report. The registry incorporates the early experience of all participating groups, and does not reflect the results which can be achieved by experienced investigators using newer immunosuppressive and management programs. To obtain this information individual series of cases must be considered.

The largest individual series of renal transplants using volunteer donors has been reported from the University of Colorado.[2] In October 1965 the results of 70 transplants performed at this institution were published. In 46 instances the kidneys had been obtained from blood relatives. The Cleveland Clinic has had the greatest experience with cadaveric transplantation.[1] Results of their first 20 cases were published in April 1965. Our own experience includes seven transplants obtained from related volunteer donors and seven cadaveric transplants. Follow-up in our cases is now long enough to make a meaningful comparison with larger series.

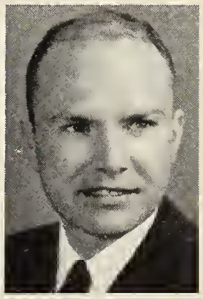
All series have been analyzed in an identical manner in this report. A life table method of determining probability of a transplant surviving has been used.[4] This method has the advantage of allowing all data to be utilized, no matter how short the follow-up period. Since corrections are made for cases which are lost or die during an interval or are observed for only part of an interval, results are expressed in terms of the probability of a transplant functioning, rather than the actual percentage of cases surviving. A similar method has been used by Barnes to evaluate transplantation results.[5]

The complications associated with renal transplan-

Co-authors



J. C. Cerny, M.D.



J. G. Turcotte, M.D.

The authors are associated with the departments of surgery and internal medicine at the University of Michigan Medical Center. This work was supported in part by the United States Public Health Service Clinical Research Unit Grant No. 5M01FR-42, and by the Maud T. Lane Scientific Research Fund.

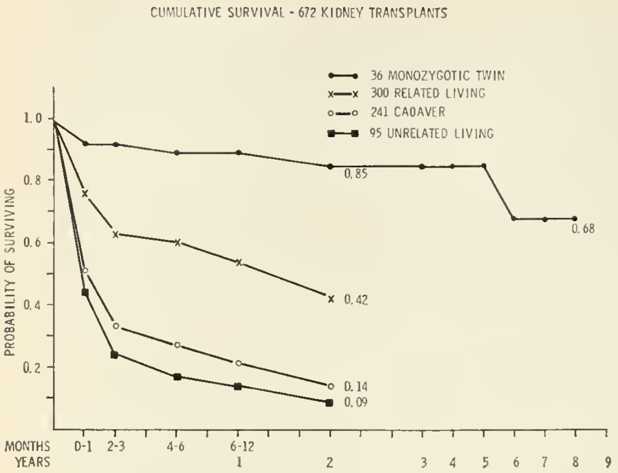


Figure 1. Correlation of probability of functioning transplant with donor source derived from March 1965 Human Kidney Transplant Registry report.

tation have not been discussed extensively in the literature. To portray some idea of the number, type and significance of complications encountered in renal transplantation, information available in published series has been combined with our own experience.[3,6,7,8,9,10,11] Complications reported in the first 42 cases at the University of Colorado and in 7 cases from the University of Michigan are listed as examples of problems encountered using related and unrelated volunteer donors.[4] Complications reported by the Cleveland Clinic and encountered in the seven cadaveric transplants at the University of Michigan are included as examples of morbidity entailed by cadaveric transplants.[3]

These complications are subdivided into three groups: (1) Complications primarily resulting from the uremic state; (2) complications attributed to the operation itself, and (3) complications associated with immunosuppressive therapy and rejection. This list is necessarily incomplete and the subdivisions are arbitrary because of the lack of details in published reports and our inability to assign specific etiologies to some complications. For example, hepatitis is listed under complications due to uremia because most jaundice encountered is due to serum hepatitis, and the most likely source of virus is bloo administered during hemodialysis to control uremi Ureteral fistulae are listed under operative complications, but fistulae can result from rejection of th ureter and some of these fistulae could be listed logically under rejection. Psychosis is classified as a complication of steroid therapy, but many uremic patient not receiving steroids experience delusions and othe psychotic episodes.

TABLE I. CORRELATION OF PROBABILITY OF FUNCTIONING TRANSPLANT WITH DONOR SOURCE DERIVED FROM MARCH 1965 HUMAN KIDNEY TRANSPLANT REGISTRY REPORT

	1 Year	95% Confidence Limits	2 Years	95% Confidence Limits
Monozygotic twin	0.89	0.79-0.99	0.85	0.73-0.97
Related Volunteer	0.54	0.44-0.64	0.42	0.34-0.50
Unrelated volunteer	0.14	0.06-0.22	0.09	0.01-0.17
Cadaver	0.21	0.15-0.27	0.14	0.07-0.21

RESULTS

Figure 1 and Table I summarize survival statistic derived from the latest Human Kidney Transplan Registry report of March 1965.[1,5] The probabilit of kidneys functioning at the indicated time interva is correlated with the donor source of the kidney.

At one year, recipients receiving kidneys from a identical twin have an 89 per cent probability of retaining a functioning kidney.

In comparison the probability of kidneys continuin to function at one year is 54 per cent when the graf is donated by a related donor, 21 per cent when obtained from a cadaver and 14 per cent when obtaine from unrelated volunteers. The difference in result when grafts are obtained from blood relatives compared to grafts obtained from unrelated donors i statistically significant, that is, 95 per cent confidenc limits do not overlap. The differences within th unrelated group, that is, between cadaveric transplants and grafts obtained from living unrelate donors are not significant. The probability of graft continuing to function at two years is 85 per cen for grafts obtained from a monozygotic twin, 4 per cent when obtained from a related voluntee 9 per cent when obtained from a unrelated voluntee and 14 per cent when obtained from a cadaver. Th 95 per cent confidence limits are listed in Table I

Table II compares results of individual series o transplants with the Kidney Registry results. In bot individual series the probability of a graft obtaine from a related volunteer continuing to function fo 12 months exceeds the general experience reporte by the registry. The confidence limits of these serie overlap considerably, however, so chance alone coul account for this difference. Six of seven patients i the Michigan series of related volunteers are aliv Three of these patients have survived longer tha one year. The transplanted kidney has been remove from one patient because of a urinary fistula, an she is being maintained by hemodialysis while awaiting a cadaveric transplant. The other patients ar home and have returned to work.

The Cleveland Clinic experience with cadaveri transplants has been considerably better than th general results. (Table II). The probability of cadaveric transplant functioning at 12 months is 2 per cent as determined by the registry and 42 pe ent at the Cleveland Clinic. There is only slight overlapping of the confidence limits from these two ources, so that it is probable, but not yet proven, hat this difference is real.

Tables III, IV, and V list the complications associated with renal transplantation. A total of 111 complications in 49 cases is recorded in which the transplant was obtained from a related or unrelated volunteer donor. Thirty-nine complications in 27 cases of cadaveric transplants are listed. More complicaions would be expected to be reported in the voluneer group because the follow-up has been longer. Significant problems have been the high incidence of all types of infections, the occurrence of a distressing number of urinary fistulae, the onset of hepatitis n the late postoperative period, and the side effects of chronic steroid administration.

In our experience only two episodes of acute rejecion have been encountered when the kidney was obained from a blood relative. In both cases rejection was readily reversed by increasing the dose of prednisone and adding Actinomycin C to the immunouppressive regimen. Acute rejection is not as readily controlled when the grafts are obtained from unreated donors. Chronic rejection as manifested by lowly declining renal function in the late postoperaive period has been a serious problem in all series, but the incidence cannot be estimated from available eports.

DISCUSSION

The experience with related volunteer kidney transplants has been encouraging to us. Many patients are eading useful lives and require only small doses of mmunosuppressive drugs. Most mortality and morbidity occurs in the first three or four months following transplantation, so that patients who retain funcioning kidneys for this period have a good chance of urviving two years. (Figure 1).

The probability of patients surviving beyond two ears cannot yet be determined, but there will likely be a slow attrition as infection, the toxicity of immunouppressive drugs, and chronic rejection exert their deleterious effects. By refining the selection of donors with matching tests under evaluation today results hould be improved.[12] The risk to the donor has been calculated to be two deaths in 1000 cases in 5 ears.[13] Hamburger quotes a figure of .05 per cent mmediate mortality and .07 per cent late mortality as he risk to the donor as estimated by European insurnce companies.[14]

These small, but real risks to the donor should be weighed against the possible therapeutic benefit to he recipient when considering transplantation using a related volunteer donor.

The current status of cadaveric renal transplanion is not as well defined. The general experience ecorded in the Kidney Registry reflects a discourag-

TABLE II. COMPARISON OF INDIVIDUAL SERIES WITH REGISTRY

		Probability of Transplant Functioning at Months				Limit at 12 Months
		1	3	6	12	
Related Volunteers	Registry 3/65	0.76	0.63	0.60	0.54	0.44-0.63
	Michigan 1/66	0.83	0.83	0.65	0.65	0.15-1.00
	Colorado 3/65	0.80	0.67	0.63	0.59	0.46-0.73
Cadaver	Registry 3/65	0.51	0.33	0.27	0.21	0.15-0.27
	Cleveland 7/64	0.63	0.51	0.42	0.42	0.16-0.68

TABLE III. COMPLICATIONS OF UREMIA.
Hepatitis may be either viral in origin or due to toxicity of immunosuppressive drugs.

	Colorado and Michigan 49 Cases Related and Unrelated Volunteer Donors	Cleveland and Michigan 27 Cases Cadaver Donors
Hepatitis	4	0
Convulsions and Coma	7	1
Stroke	1	0
Cardiac Arrest	2	2
Pulmonary Edema		1

TABLE IV. OPERATIVE COMPLICATIONS.
Non-viable kidneys include those with a thrombosed renal artery or vein.

	Colorado and Michigan 49 Cases Related and Unrelated Volunteer Donors	Cleveland and Michigan 27 Cases Cadaver Donors
Urinary Fistulae	4	4
Nonviable Kidney	0	6
Thrombophlebitis	10	1
Pulmonary Embolus	5	1
Wound Infection	14	4
Urinary Tract Infection	16	3

TABLE V. COMPLICATIONS RELATED TO DRUG TOXICITY AND REJECTION.
The majority of patients have some degree of hypertension. Some cases of psychosis may be related to uremia and not be primarily steroid induced.

	Colorado and Michigan 49 Cases Related and Unrelated Volunteer Donors	Cleveland and Michigan 27 Cases Cadaver Donors
GI Hemorrhage	7	1
Diabetes	13	1
Aseptic Bone Necrosis	1	0
Hypertension	7+	9+
Brain Abscess	3	0
Pneumonia	7	2
Septicemia	1	1
Other Infection	1	1
Psychosis	8	1

ing failure rate. The best individual series shows only a 42 per cent probability of a functioning kidney at one year.

The obvious advantage of cadaveric transplantation is the elimination of donor risk, but the task of finding sufficient numbers of suitable cadaver donors is formidable. The immunologic challenge of a kidney from an unrelated donor is considerably greater than is seen in the related situation. For example, in one series only 28 per cent of patients who received kidneys from unrelated volunteers were alive one year or more following transplantation, whereas 67 per cent of patients who received grafts from blood relatives lived beyond 12 months.[2] When the technical and logistical problems of obtaining viable organs from a cadaver are added to the problems engendered by increased immunologic disparity, it is not surprising that results have often been disappointing.

Nevertheless, the cadaver is a logical source of organ transplants. More potent and less toxic immunosuppressive agents, suitable matching tests, and methods of preserving organs *in vitro* are needed in order to improve results with this group.

The postoperative course of many recipients has been marred by one of the many complications associated with transplantation. Some complications, such as urinary fistulae or deep seated infection, almost invariably lead to loss of the kidney or death of the patient. It is frequently impossible to control the infections unless immunosuppressive therapy is stopped and the transplant is removed. The patient may have a second transplant at a later date.

Pneumonia, wound infections, and urinary tract infections can often be eradicated with antibiotics while the recipients remain on immunosuppressive therapy. Steroid-induced diabetes, hypertension, and thrombophlebitis are usually managed satisfactorily with medical therapy. The incidence of homologous serum jaundice might be reduced by the use of gamma globulin. Some cases of jaundice may be due to the immunosuppressive drug, azothioprine.

Many problems, such as gastrointestinal hemorrhage secondary to steroid ulcer, will continue to appear until improved methods of immunosuppression are introduced. The morbidity entailed by these complications, as well as survival statistics, should be considered when judging the therapeutic benefit of renal transplantation.

Renal transplantation is still an experimental procedure. Additional experience must be obtained and the number of complications reduced before general clinical application can be advised. The encouraging results, when carefully selected related volunteers are used as donors, justify additional intensive investigation with this group. Because cadaveric transplantation does not involve any donor risk, efforts to improve results with this source of kidneys should be continued despite the fact that over 50 per cent of such transplants fail within one year. When the experience of the recent past is compared with today's results it is obvious that significant advances have been made. With the greatly expanded investigative effort in transplantation, additional progress can reasonably be anticipated during the next few years.

SUMMARY

The results of renal transplantation as recorded by the Human Kidney Transplant Registry are correlated with the donor source of the kidney. Experience with transplantation at the University of Michigan is compared with the registry and other individual series. The probability of renal homografts donated by blood relatives continuing to function is 54 per cent for one year and 42 per cent for two years. The probability of cadaveric transplants continuing to function for one year is 21 per cent. Major complications associated with transplantation include infection, urinary fistulae, hepatitis, and the side effects of chronic steroid administration. Renal transplantation is an experimental procedure, but present results encourage additional investigation.

BIBLIOGRAPHY

1. Murray, J. E., Gleason, R., and Bartholomay, A.: Fourth report of the human kidney transplant registry: September 16, 1964 to March, 1965. Transplantation, 3:684, 1965.
2. Starzl, T. E., Marchioro, T. L., Terasaki, P. I., Porter, K. A., Faris, T. D., Herrmann, T. J., Vredevoe, D. L., Hutt, M. P., Ogden, D. A., and Waddell, W. R.: Chronic survival after human renal homotransplantation. Lymphocyte-antigen matching, pathology and influence of thymectomy. Ann. Surg., 162:749, 1965.
3. Nakamoto, S., Straffon, R. A., and Kolff, W. J.: Human renal homotransplantation with cadaver kidneys. J.A.M.A., 192:302, 1965.
4. Merrell, M., and Shulman, L. E.: Determination of prognosis in chronic disease, illustrated by systemic lupus erythematosus. J. Chron. Dis., 1:12, 1955.
5. Barnes, B. A.: Survival data of renal transplantations in patients. Transplantation, 3:812, 1965.
6. Starzl, T. E., Marchioro, T. L., Dickinson, T. C., Rifkind, D., Stonington, O. G., and Waddell, W. R.: Technique of renal transplantation. Arch. Surg., 89:87, 1964.
7. MacLean, L. D., Dossetor, J. B., Gault, M. H., Oliver, J. A., Inglis, F. G., and MacKinnon, K. J.: Renal homotransplantation using cadaver donors. Arch. Surg., 91:288, 1965.
8. Rifkind, D., Marchioro, T. L., Waddell, W. R., and Starzl, T. E.: Infectious diseases associated with renal homotransplantation. J.A.M.A., 189:397, 1964.
9. Rifkind, P., Starzl, T. E., Marchioro, T. L., Waddell, W. R., Rowlands, D. T., and Hill, R. B.: Transplantation pneumonia. J.A.M.A., 189:808, 1964.
10. Starzl, T. E., Marchioro, T. L., Porter, K. A., Moore,

C. A., Rifkind, D., and Waddell, W. R.: Renal homotransplantation late function and complications. Ann. Int. Med., 61:470, 1964.

1. Starzl, T. E., Marchioro, T. L., Rifkind, D., Holmes, J. H. Rowlands, D. T., and Waddell, W. R.: Factors in successful renal transplantation. Surg., 56:296, 1964.

2. Goldsmith, K. L. G.: Donor selection and compatibility typing. Brit. Med. Bull., 21:162, 1965.

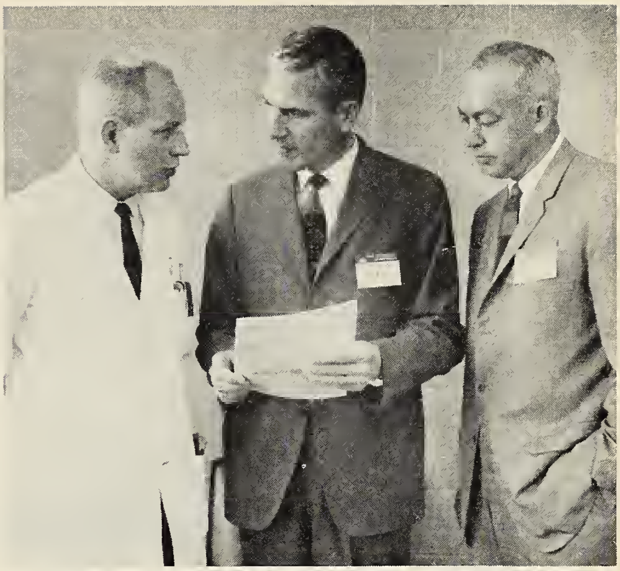
3. Russell, P. S., and Monaco, A. P.: The Biology of Tissue Transplantation. Little, Brown and Company, Boston, Massachusetts, 1965. Page 160.

4. Hamburger, J.: Discussion in General Session, National Academy of Sciences-National Research Council Conference on Kidney Transplants. May 16-17, 1965, Washington, D. C.

COMMUNITY HEALTH WEEK

TEAMING UP FOR BETTER HEALTH

OCTOBER 16-22



Richard C. Schneider, M.D., left, Ann Arbor, a member of the AMA Committee on the Medical Aspects of Organized Athletics, confers with two members of the MSMS Committee on the Medical Aspects of Organized Athletics at the 1966 MSMS Conference on High School Sports at the University of Michigan. Gerald Drake, M.D., center, is from Petoskey, and Kenneth VandenBerg, M.D., right, is from Pontiac. The MSMS Committee is promoting greater M.D. interest in serving as team doctors and is promoting greater public appreciation of the role played by the team doctors—all in a special August-September educational thrust.

ADVICE FOR CONTRIBUTORS

1. Address scientific manuscripts to he Publication Committee, Michigan tate Medical Society, 120 West Saginaw treet, East Lansing, Michigan.

2. Submit original, double-spaced ypewritten copy and one carbon copy on etter size (8½ x 11 inch) paper.

3. On page one, include title, authors, egrees, academic titles, and any institu onal or other credits.

4. Authors are responsible for all atements, methods, and conclusions. hese may or may not be in harmony ith the views of the Editorial Staff. It hoped that authors may have as wide titude as space available and general olicy will permit. The Publication Com ittee expressly reserves the right to alter r reject any manuscript, or any contribu on, whether solicited or not.

5. Illustrations should be submitted in the form of glossy prints or original sketches from which cuts, or plates, will be made by Michigan Medicine. Michigan Medicine will pay the first $25 of the engraving bill, and the author shall pay the balance. An estimate of the cost will be submitted to authors before cuts are ordered.

6. References will ordinarily be limited to seven in number. Exceptions may occasionally be made.

7. Contributors will be notified as soon as practical if a manuscript is accepted for publication. Unused manuscripts will be returned. Every care will be taken with the submitted material but the Journal will not hold itself responsible for loss or damage to manuscripts.

8. Articles should ordinarily be less than four printed pages in length (3000 words).

9. References should conform to *Cumulative Index Medicus*, including, in order: Author, title, journal, volume number, page, and year. Book references should include editors, edition, publisher, and place of publication, as well.

10. Specify address to which galley proofs should be sent. Proofs will be mailed to authors for correction before publication and should be returned to the editor in 48 hours. If proofs approved by the author are not received by the editor prior to deadline, publication of the article will be cancelled for that issue.

11. The editors welcome, and will consider for publication, letters containing information of interest to Michigan physicians, or presenting constructive comment on current controversial issues. News items and notes are welcome.

12. It is understood that material is submitted for exclusive publication in Michigan Medicine.

ORIGINAL SCIENTIFIC ARTICLE

Women with rheumatic valvular disease who have been classified as Grade III or Grade IV cardiacs have been advised for many years by their family physician, internist, cardiologist and obstetrician to avoid pregnancy. With their degree of myocardial insufficiency a pregnancy could further embarrass their limited myocardial reserve. With the advent of open heart surgery, and the replacement of the diseased valves with prosthetic valves, the outlook has changed. Reported in this article are two examples of patients who had successful pregnancies following replacement of their mitral valves.

Successful Pregnancies in Patients With Prosthetic Mitral Valves

By

Aran S. Johnson, M.D.
Marjorie Peebles Meyers, M.D.
Arthur S. Eckhous, M.D.
Burton Bacher, M.D.
Anthony Limia, M.D.

Many a mature married female in the past, has been unable to fulfill her desire for pregnancy as a result of a crippling heart condition. With the advent of open heart surgery, thousands of young females every year are having corrective surgery for these disabling heart lesions.

In February 1966, Ueland et al reported the first successful pregnancies in two patients with prosthetic intracardial aortic valves. The Starr-Edwards ball valves were used.

It is the purpose of this paper to present two additional cases of successful pregnancies with the mitral valve prosthesis (Starr-Edwards Valve).

Case Reports

Case #1: R.C. was a married 34-year-old Negro secretary with a long established history of heart disease. She had rheumatic heart disease at the age of 9 and sub-acute bacterial endocarditis when she was 19. Her physical activities had been restricted since adolescence. In 1960, she became more symptomatic and required several hospitalizations for treatment of her congestive heart failure.

On July 13, 1964, she was admitted to Harper Hospital, for a right and left cardiac catheterization and cineangiocardiogram. These studies revealed pulmonary wedge mean pressures of 13.5, with right ventricular pressures of 47/0. V-waves were present in the wedge and in the right atrium. Primary diagnosis: Grade IV mitral insufficiency with secondary tricuspid insufficiency.

Obstetrical History

1952	3 months pregnancy	Spontaneous abortion
1958	3 months pregnancy	Spontaneous abortion
Mar. 1962	Incomplete abortion	
Oct. 1962	20-week pregnancy	Live premature delivery; baby died within 24 hours
Dec. 1965	40-week-pregnancy	Live delivery of healthy male infant (16 months following open heart surgery)

On July 29, 1964, this patient had open heart surgery. At operation all four cardiac chambers were grossly enlarged. The mitral valve was thickened with shortening of the cordae. The valve was excised and replaced with a Starr-Edwards Valve. Her convalescence was uneventful. Three months following surgery she returned, on a full-time basis, to her job as a secretary.

On December 19, 1965, sixteen months following her open heart surgery, she gave birth to a normal, healthy male infant. During the delivery, she received spinal anesthesia. The delivery was smooth and uneventful. She was discharged seven days later.

Case #2. V.S. was a 40-year-old married Negro housewife with a history of six recurrent attacks of rheumatic fever from 1941-1958. She was hospitalized for each of her rheumatic episodes. When this patient was first examined in 1964 a grade IV-VI

Doctor Johnson is a cardiovascular surgeon at Harper Hospital; Doctor Meyers is an internist, Hutzel Hospital; Doctor Eckhous, Doctor Bacher and Doctor Limia are all obstetricians, Hutzel Hospital.

systolic murmur was present at the apex. The murmur was transmitted to the left scapula. Heart rate was 80/min. and irregular. Blood pressure, 140/80. X-ray of the chest showed gross cardiomegaly. The electrocardiogram revealed atrial fibrillation, incomplete left bundle branch block and myocardial damage. On October 27, 1964, a right and left heart catheterization and a cineangiocardiogram was done. Main pulmonary artery pressure 82/45 with a V-Wave and right ventricular pressure of 85/0. Right atrial pressure 24/14 with a V-wave. The cine revealed grade IV mitral insufficiency. The left sided pressures were normal without a gradient across the aortic valve. The diagnosis was Grade IV mitral insufficiency with secondary tricuspid insufficiency.

Obstetrical History

954	4 months tubal pregnancy	
956	Full term pregnancy	8 lb. 2 oz. female living and well
957	Full term pregnancy	5 lb. 11 oz female living and well
April 1966	Full term pregnancy	5 lb. 14 oz. male living and well (17 months following open heart surgery)

On November 13, 1964, open heart surgery was performed on this patient. At operation, her heart was very large. All four cardiac chambers were dilated and hypertrophied. The mitral valve was grossly deformed and incompetent. The valve was excised and replaced with a Starr-Edwards ball valve. Her postoperative course was uneventful. Three months following her surgery, she was carrying out her household duties without difficulty. On April 6, 1966, 17 months following her mitral valve replacement, she gave birth, under spinal anesthesia, to a normal, healthy male infant. There was no difficulty during delivery or postpartum. She was discharged seven days later.

Post-operative Medication and Discussion

It is common practice to carry our patients with prosthetic intracardiac valves on anticoagulants indefinitely with maintenance doses at therapeutic levels. The reported cases also received anticoagulants until one month before their estimated dates of delivery. Their prothrombin time was determined weekly and when prolonged, corrected with vitamin K. The only other medication the pregnant patients received was their maintenance dose of Digitalis, salt restricted diets, and Quinidine.

The future is brighter for the female patient with valvular disease who is in the productive years of her life. Fear on the part of the internist, obstetrician and the patient, can now be allayed. With the improvements in open heart surgery and the development of newer and better prosthetic valves, severe grades of valvular defect can be greatly improved.

Co-author
Aran S. Johnson, M.D.

VOTE AS YOU PLEASE,
BUT PLEASE VOTE NOV. 8

SUMMARY

The successful outcome of pregnancies in two women with prosthetic replacements of severely damaged mitral valves is reported.

REFERENCES

1. Canfield, M. C., Edgar, A. L., and Kimball, A. P.: Successful completion of pregnancy in a patient with a Hufnagel valve. California Med., 8:54, 1958.
2. Cooley, D. A., Nelson, T. G., Beal, A. C., Jr., and Hallman, G. L.: Total prosthetic replacement of the mitral and aortic valves. Amer. J. Cardiol., 13:102, 1964.
3. Crocket, J. D., Kittle, C. F., and Dimond, E. G.: Relief of angina and congestive heart failure by a Hufnagel valve: Subsequent term pregnancy. Amer. Heart J., 47:144, 1959.
4. Effler, D. B., Groves, L. K., and Favalora, R.: Aortic and mitral valve replacement: Experience with Starr-Edwards prosthesis. Arch. Surg., 88:145, 1964.
5. Starr, A., Edwards, M. L., McCord, C. W., and Griswold, H. E.: Aortic replacements: Clinical experience with a semi-rigid ball valve prosthesis. Circulation, 27:779, 1963.
6. Ueland, K., Tatum, H. J., and Metcalfe, J.: Pregnancy and prosthetic heart valves. Report of successful pregnancies in 2 patients with Starr-Edwards Aortic valves. Obstet. Gynec., 27:257, 1966.

Aran S. Johnson
David Whitney Bldg.
Detroit 26, Mich.

ORIGINAL
SCIENTIFIC
ARTICLE

THE USE OF THE INTRAVENOUS TOLBUTAMIDE TEST

A Cortisone-Tolbutamide And A Glucagon-Tolbutamide Test In the Diagnosis of Diabetes Mellitus

By Feridun Gurol, M.D.
Detroit

The hypoglycemic response of diabetic patients to an orally administrated test dose of tolbutamide has been shown by Mirsky, Diengott and Dolger[1] to differ strikingly from that of nondiabetic subjects. Intravenously administrated sodium tolbutamide produces a prompt and rapid fall in blood sugar in normal subjects; whereas. mild diabetics exhibit a gradual decline.[2] Experimental evidence supports the belief that tolbutamide stimulates endogenous secretion of insulin.[3,4,5,6,7]

On that basis, intravenous tolbutamide has been used as a diagnostic agent for the discovery of mild diabetes.[2,3] In addition, Barreto and Recant showed in 26 patients who previously had normal I.V. tolbutamide curves, that pretreatment with dexamethasone or prednisone resulted in abnormal I.V. tolbutamide tests in eight patients.[8]

The purpose of the following study is to compare the I.V. tolbutamide test with other diagnostic tests, to study the associated use of cortisone and glucagon, and to evaluate diabetic and nondiabetic state over a follow-up period of two to seven months in some selected cases. We were particularly interested in questionable diabetic patients who showed borderline or abnormal tolbutamide curves, but none or very little laboratory evidence of the disease.

Early detection of diabetes is very important for the prevention of some of the complications. Tuberculosis has been recognized as an important complication of diabetes. Besides, some studies[9] showed high incidence of diabetes in tuberculous patients.

MATERIAL AND METHODS

Forty-seven hospitalized patients were selected from the Tuberculosis Service of Herman Kiefer Hospital. The intravenous tolbutamide test was performed in these patients, at first alone, and later in combination with cortisone or glucagon in 75 trials. All the patients were kept in the hospital throughout the study.

The nondiabetic or diabetic status of all the patients was established by means of history, physical examination, urine sugar and acetone tests four times daily, fasting and postabsorptive blood sugar determinations at regular intervals or daily in some cases, and the use of cortisone-glucose or glucose tolerance tests in selected subjects. Follow-up period ranged from two to seven months.

Eight mild diabetic patients (group I) were selected who had been on diabetic diet only, with normal fasting and postabsorptive blood sugars and negative urine sugar for at least fourth months prior to the tolbutamide test. The diagnosis of diabetes had been made in these patients in the past by a routine urine analysis or blood sugar determination or glucose tolerance test.

Thirteen patients (group II) had shown a trace of sugar in the urine on one or two occasions, or a fasting blood sugar of 100-120 mg per cent; normal or borderline postabsorptive blood sugars or a normal or borderline glucose tolerance test. These patients had been on regular diet.

Twenty-six patients (group III) were picked at random from the hospital population. They showed no clinical or laboratory evidence of diabetes. They were tested with I.V. tolbutamide initially. Those who gave borderline or abnormal results with I.V. tolbutamide from this group and from the second group were retested with the same agent prior to

---

Doctor Gurol is an Associate Professor, Wayne State University School of Medicine. The study was done at the Herman Kiefer Hospital, Diabetic Service, Detroit.

the use of cortisone and glucagon. The results obtained were compared with cortisone-glucose and glucose tolerance tests as well as with tolbutamide tests of nondiabetics. None of 47 patients had associated diseases which affect carbohydrate metabolism. Their tuberculosis was under control.

All 47 subjects were requested to adhere to a diet containing 300 gm of carbohydrate daily for at least three days prior to the test. After an over-night fast and withdrawal of a fasting blood specimen, 1 gm of tolbutamide, diluted in 10 cc of distilled water, was injected intravenously in 45 seconds. Blood was drawn 20 and 30 minutes after injection. In 75 trials, five patients or 6.6 per cent developed postinjection thrombosis. During the rapid injection of tolbutamide, some patients complained of local discomfort and a burning sensation along the course of the vein.

We have used the following technique for the performance of the cortisone-tolbutamide test, following the recommendations of Fajans and Conn.[10] Patients weighing less than 160 lbs received orally 50 mg of cortisone acetate 8½ hours and again 2 hours before the test. If body weight exceeded 160 lbs, 12½ mg of cortisone acetate was given orally at the same time, intervals.

In the performance of the glucagon-tolbutamide test, 1 mg of glucagon was given subcutaneously five minutes after I.V. tolbutamide was injected. Blood samples were taken 20 and 30 minutes afterward.

The results of glucose tolerance and cortisone-glucose tolerance were interpreted according to the criteria established by Mosenthal-Barry[11] and Conn-Fajans.[10] The modified Folin-Wu procedure was used for the blood sugar determination, thus eliminating the presence of nonglucose substances from the filtrate.

RESULTS

In Figure 1, the individual blood glucose levels of all subjects, expressed as per cent of the pretest value, are recorded at 20 and 30 minutes after tolbutamide injection. The mean level at 20 minutes of the nondiabetics fell to 62 per cent of the pretest value. At 30 minutes, it fell to 44 per cent of the pretest value.

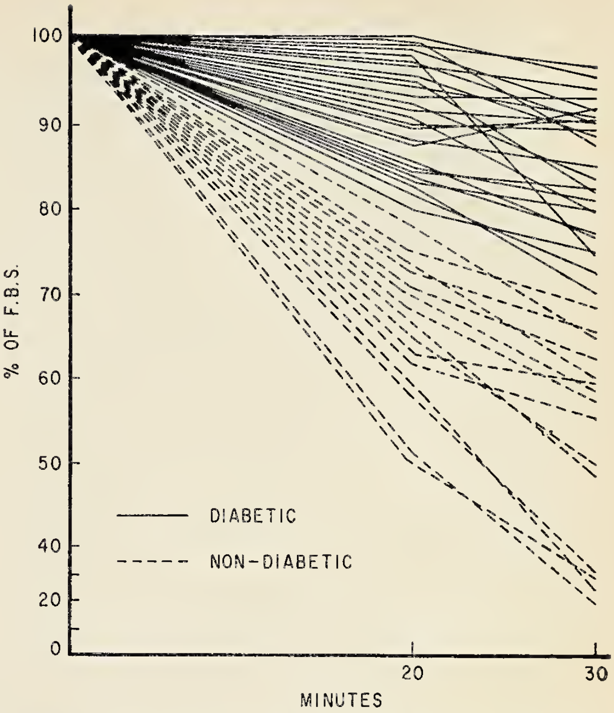


Figure 1. Overall result of intravenous tolbutamide test (There has been overlapping in some curves).

In contrast, diabetic subjects exhibited a far less rapid decline. The mean glucose concentration at 20 minutes fell only to 89 per cent of the pretest value and ranged from 100 to 78 per cent. Thirty minutes after injection, the mean level was 82 per cent and ranged from 95 to 70 per cent.

The Author
Feridun Gurol, M.D.

Figure 2 shows the effect of cortisone on the tolbutamide curve in nondiabetic patients. It will be noted that the tolbutamide response curve parallels that of the cortisone treated group.

Figure 3 compares tolbutamide response curves with cortisone-tolbutamide response curves in borderline diabetics, who were so identified by their initial I.V. tolbutamide tests according to the method described earlier. However, some of these patients gave diabetic curves, but, because of lack of other definite laboratory evidence of diabetes, they were classified as borderline. In contrast to the response of nondiabetics, this group exhibited a more horizontal direction of their curves at high levels. Furthermore, blood sugar levels of all three specimens were higher than among nondiabetics at the same intervals.

A separate analysis was done to evaluate the effect of glucagon on the tolbutamide curves (Figure 4). A marked elevation of the glucagon-tolbutamide curves may be noted but the response was similar in diabetics and non-diabetics. In two patients with chronic pancreatitis and mild diabetes (curves 4 and 36) a virtually horizontal curve is described. These two patients did not require insulin. Their diabetes had been under control with diet alone and their pancreatitis

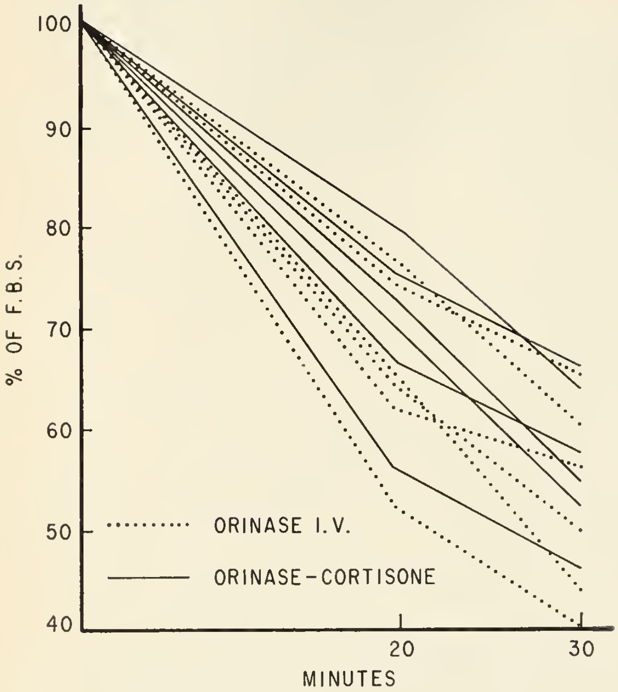


Figure 2. The effect of cortisone on the tolbutamide curve in some nondiabetic patients. Notice the resemblence of both curves. (Tolbutamide is the name for Orinase®).

was quiescent for at least one year and four years respectively.

While the glucagon-tolbutamide test may be of no value in identifying the borderline diabetic, we feel that the I.V. tolbutamide and cortisone-tolbutamide test are useful in this group of borderline or potential diabetics.

DISCUSSION

The immediate response to intravenous tolbutamide appears to depend upon the release of insulin from the pancreas.[12] If, indeed, this is the mechanism of action of this agent, one can conclude that the type of blood sugar response to these agents must be dependent upon the available insulin in the pancreas, and it will not be surprising, therefore, that in the diabetic the decline in blood sugar is of smaller magnitude. In completely depancreatized experimental animals[4,6,13,14] or man[7,15] these agents are not effective in producing hypoglycemia, but where functioning islet tissue remains after subtotal pancreatectomy or incomplete beta-cell destruction by alloxan, lesser degrees of hypoglycemia are produced.[16] However, we have to accept the fact that though hypoglycemia may result in part from beta-cell stimulation, hepatic factors, as well as endocrine influences or insulin potentiation[17,18,19] may also be operating.

In this study, we have felt that the intravenous tolbutamide response test differentiates mild diabetics from nondiabetic controls, as shown by others.[2,20] However, we were not able to find a close relationship between the severity of diabetes and the hypoglycemic response seems to be more marked.

A certain amount of overlap between normals and abnormals is likely to appear. Diagnostic errors in this borderline area can be minimized by pretreatment with cortisone. Intravenous injection of tolbutamide after cortisone presumably tests the pancreatic reserve, and the diabetic patient or individual with diminished reserve shows a significantly smaller fall in blood sugar. The change in the tolbutamide test toward a diabetic curve following the use of cortisone may indicate the presence of diabetes or the prediabetic state. In nondiabetic subjects with a normal tolbutamide test, the cortisone-tolbutamide test has been found to be very similar.

The detection of the prediabetic state is important though often difficult to diagnose under ordinary circumstances. In a group of these patients, we observed only occasional glycosuria and hyperglycemia. When the prediabetic state is identified, measures may be taken to avoid some of the complications by dietary and other controls.

Administration of glucagon results in a rise in the blood sugar level by stimulation to hepatic glycogenolysis. A number of studies have shown that glucogan also increases gluconeogenesis.[21,22] In one study,[23] stable diabetics exhibited an excellent hyperglycemic response of a magnitude similar to that observed among normal individuals. The unstable diabetics, however, showed only a minimal response to glucagon. It has been shown that glucagon elicits a hyperglycemic response even during sulphonylurea treatment.[24] The explanation offered by German workers[25] that sulphonylurea inhibits the production of glucagon by the pancreatic alpha-cells has not been confirmed.[26] The capacity of glucagon to raise blood sugar despite subsequent injection of tolbutamide, was not different in diabetics and nondiabetics in our study.

In two patients who had mild diabetes and chronic inactive pancreatitis, a flat curve was obtained after glucagon-tolbutamide injection. If adequate amounts of glycogen are present in the liver, hyperglycemia is the classic response to glucagon in man. We have no explanation for this since these two patients were in excellent condition and did not show any evidence of hepatic failure.

Tuberculosis has been recognized as an important complication of diabetes. Several studies support this point of view: Kennedy[27] 1.6 per cent incidence in 2500 diabetics, Root[28] 2.8 per cent among 137 diabetics examined roentgenographically and 2.45 per cent among 10,000 diabetics in Joslin's series. Incidence of tuberculosis in the general population in the United States as found by roentgenography occurs on the average in about 0.3 to 0.4 per cent.[29,30] From the above studies one may conclude that tuberculosis is six times more common in diabetics than in nondiabetics. Besides, patients with poorly controlled diabetes appear to develop active tuberculosis more commonly than those with well controlled disease. The longer the duration of diabetes the greater is the likelihood of complicating tuberculosis.

The mortality rate of tuberculous diabetics prior o the advent of chemotherapy was eight times that of the nondiabetic; since then, those who have received adequate chemotherapy have shown no greater mortality than that of the nondiabetic tuberculous patient.[31] The obliteration of the differences in mortality rates of the nondiabetic and diabetic tuberculous patient is dependent upon effective chemotherapy as well as adequate diabetic control and early recognition of diabetes.

If the incidence of tuberculosis is much higher among diabetics, the corollary that diabetes is more frequent among tuberculous patients is also suggested.[9] The incidence of diabetes in the general population varies considerably,[32,33,34,35] but with an verage of 0.7 per cent. The incidence of diabetes in tuberculous patients shows even wider range, being .6 to 6.4 per cent.[9,36,37] In the present study, among 6 tuberculous patients who were picked at random rom the hospital population, six were found to have mild or latent diabetes. It is recognized that the roup is too small for any conclusion, but it suggests hat the incidence of diabetes in tuberculous patients higher than the general population and that mild diabetics may be missed in routine examinations. We el that every tuberculous patient should have routine postabsorptive blood sugar at admission and at arying intervals thereafter. If indicated, more sensitive tests have to be performed.

SUMMARY

Forty-seven hospitalized diabetic, nondiabetic and questionable diabetic patients were tested with I.V. tolbutamide, cortisone-tolbutamide and a glucagon-tolbutamide test for evaluation of diabetic or nondiabetic state over a follow-up period of two to seven months.

It was found that I.V. tolbutamide is a sensitive test in detection of mild diabetes.

The cortisone-tolbutamide test was found to be a useful procedure in evaluation of the questionable diabetic who had a borderline curve with the I.V. tolbutamide test.

The glucagon-tolbutamide test gave similar responses in diabetic and nondiabetic subjects. However, in two patients with chronic pancreatitis and

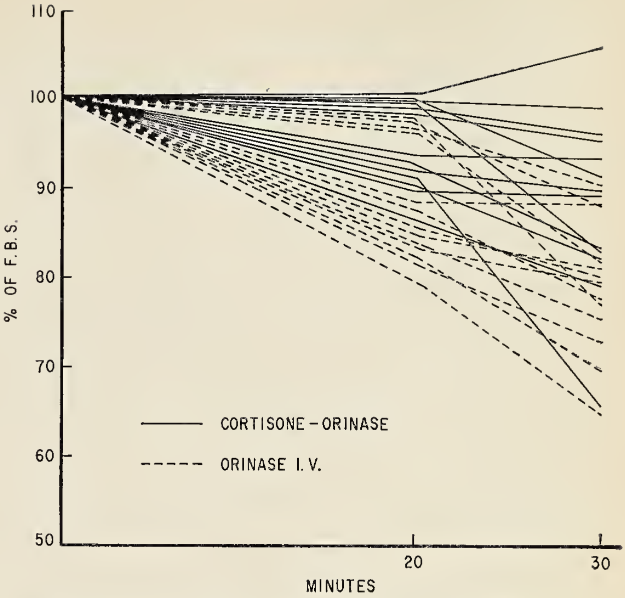


Figure 3. Comparison of tolbutamide and cortisone-tolbutamide curves in borderline diabetic patients. Notice elevation of the curve in cortisone-treated group.

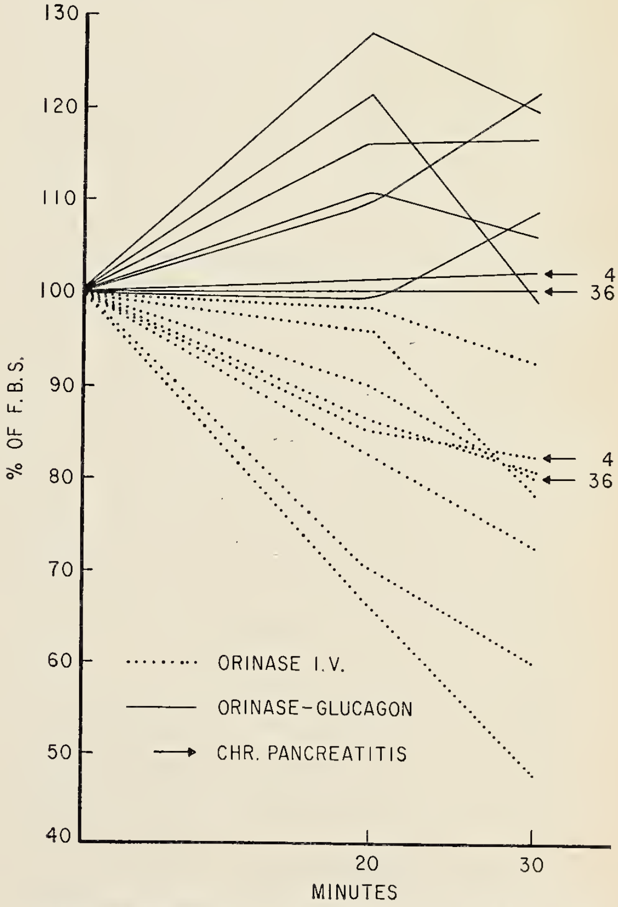


Figure 4. The effect of glucagon on the tolbutamide curve in diabetic, non-diabetic and in patients with chronic pancreatitis.

mild diabetes, a virtually horizontal curve was obtained after treatment with glucagon.

The relation of tuberculosis and diabetes and importance of discovery of the latter disease and prompt treatment of diabetes is discussed.

REFERENCES

1. Mirsky, L. A., Diengott, D., and Dolger, H.: The relation of various variables to the hypoglycemic action of 1-buytl-3-p-tolysulfonylurea in patients with diabetes mellitus. Metabolism, 5:875, 1956.
2. Unger, R. H., and Madison, L. L.: Comparison of response to intravenous administrated sodium tolbutamide in mild diabetic and non-diabetic subjects. J. Clin. Invest., 5:37, 1958.
3. Kaplan, N. M.: Tolbutamide tolerance test in carbohydrate metabolism evaluation. Arch. Int. Med., 107:2, 212, 1961.
4. Loubatières, A.: Utilisation de certaines substances sulfamidèes dans le traitment du diabete sucrè experimental. Press. Med., 63:1701, 1955.
5. Colwell, A. R., Jr., and Colwell, A. R., Sr.: Intrahepatic perfusion of the antidiabetic sulfonylureas. Metabolism, 5:749, 1956.
6. Fritz, I. B., Morton, J. W., Weinstein, M., and Levine, R.: Studies on the mechanism of action of the sulfonylureas. Metabolism, 5:744, 1956.
7. Goetz, F. C., Gilbertsen, A. S., and Josephson, V.: Acute effects of orinase on peripheral glucose utilization. Metabolism, 5:788, 1956.
8. Barreto, H. P. B., and Recant, Lillian: Tolbutamide studies in prediabetes. Ann. N. Y. Acad. Sci., 82:560, 1959.
9. Nichols, P. G.: Diabetes among young tuberculous patients. A review of the association of the two diseases. Amer. Rev. Tuberc. and Pulm. Dis., 76:1016, 1957.
10. Fajans, S. S., and Conn, J. W.: An approach to the prediction of diabetes mellitus by modification of the glucose tolerance test with cortisone. Diabetes, 3:296, 1954.
11. Mosenthal, H. O., and Barry, E.: Criteria for and interpretation of normal glucose tolerance tests. Proc. Amer. Diabetes Ass., 277-299, 1949.
12. Loubatières, A.: The mechanism of action of the hypoglycemic sulfonamides. Diabetes, 6:408, 1957.
13. Houssay, B. A., and Penhos, J. C.: Action of hypoglycemic sulfonyl compounds in hypophysectomized, adrenolectomized and depancreatized animals. Metabolism, 5:727, 1956.
14. Houssay, B. A., and Penhos, J. C.: Ann. N. Y. Acad. Sci., 71:12, 1957.
15. Fajans, S. S.: Metabolic effects of arylsulfonylurea compounds in normal men and in diabetic subjects. Metabolism 5:820, 1956.
16. Loubatières, A.: The hypoglycemic sulfonamides: History and development of the problem from 1942 to 1955. Ann. N. Y. Acad. Sci., 71:4, 1957.
17. Coren, R., and Corbo, L.: The potentiation of exogenous insulin by tolbutamide in depancreatized dogs. J. Clin. Invest., 36:1546, 1957.
18. Houssay, B. A.: The role of insulin in the action of the hypoglycemic sulfonyl compounds. Ann. N. Y. Acad. Sci., 71:25, 1957.
19. Kirtley, W. R.: Clinical and pharmacological effects of substance BZ-55 in diabetes. Diabetes, 5:351, 1956.
20. Unger, R. H., and Madison, L. L.: A new diagnostic procedure for mild diabetes mellitus. Diabetes 7:455-461, 1958.
21. Kalant, N.: The effect of glucagon on metabolism of glyclin-1-C^{14}. Arch. Biochem., 65:469, 1956.
22. Izzo, J. L., and Glasser, S. R.: Comparative effects of glucagon, hydrocortisone, and epinephrine on the protein mat. of the fasting rat. Endocrinology, 68:189, 1961.
23. Kirtley, W. R., Waife, S. O., and Peck, F. B.: Effect of glucagon in stable and unstable diabetic patients. Proc. Soc. Exper. Biol. Med., 83:387, 1953.
24. Franke, H., and Fuchs, J.: Dtsch. Med. Wschr., 80: 1449, 1955.
25. Von Holt, C., Von Holt, L., and Kroner, B.: Naturwiss, 43:162, 1956.
26. Gorman, C. K., and Weaver, J. A.: Interrelations of tolbutamide and glucagon. Lancet., 21, July 11, 1959.
27. Kennedy, W. R.: Active pulmonary tuberculosis and diabetes mellitus. Canad. Med. Ass. J., 29:482, 1933.
28. Root, H. F.: The association of diabetes and tuberculosis. New Engl. J. Med., 210:1, 78, 127, 192, 1934.
29. Kirby, W. M. M.: Tuberculosis, in Principles of Internal Medicine, ed. 2 by Harrison, New York: The Blakiston Company, Chapter 157, 1954.
30. Hinshaw, H. C., and Garland, L. H.: Diseases of the Chest, Philadelphia: W. B. Saunders Co., 1956.
31. Scott, R. A.: Tuberculosis and diabetes. Amer. Rev. Tuberc., 77:990, 1958.
32. Perrott, G. St. J., Tibbitts, C., and Britten, R. H.: National Health Survey, Pub. Health Rep., 54:1163, 1939.
33. Engelhardt, H. T., Greene, J. A., and Baird, V. C.: A new technique for the detection of hidden diabetes mellitus. Induction of hyperglycemia by feeding glucose after dietary preparation. Diabetes, 2:299, 1953.
34. Reinberg, M. H., Greeley, P. O., and Littlefield, M. S.: Early diagnosis of diabetes mellitus. JAMA, 148:1177, 1952.
35. Fox, J. R.: The incidence of diabetes mellitus and glycosuria in 19,358 college students. J. Lancet., 72: 479, 1952.
36. Banyai, A. L.: Diabetes and pulmonary tuberculosis. Amer. Rev. Tuberc., 24:650, 1931.
37. Wiener, J. J., and Kavee, J.: Pulmonary tuberculosis and diabetes mellitus. Amer. Rev. Tuberc., 34:179, 1936.

Stay healthy with regular Cancer Check-ups. See your doctor or call for appointment at your U/F Cancer Detection Center . . . 833-0710. Do it now. Do it Once a Year.

MICHIGAN
CANCER
FOUNDATION
4811 John R, Detroit
Phone 833-0710

Hypofibrinogenemia: Its Diagnosis and Treatment In the Obstetric Patient

ORIGINAL SCIENTIFIC ARTICLE

By Joseph S. Betts, M.D.
Ann Arbor/Fort Meade, Maryland

Hemorrhage during pregnancy continues to be a major cause of fetal and maternal morbidity and mortality, but until comparatively recently the imortance of aberrations in the clotting mechanism was ot recognized as a factor in serious obstetric hemorhage. The literature, however, now contains many reports of the various bleeding diatheses which deelop in conjunction with certain obstetric complicaons.[3,4,5]

The most common and important of these is fibriopenia. Explanations for the reduction in available brinogen during pregnancy have been discussed. n brief, the entrance of thromboplastin, or a thromoplastin-like substance, from necrotic decidua at the lacental site or from amniotic fluid into the materal circulation is presumed to be the basic cause. Thromboplastin unites with maternal fibrinogen to rm fibrin which is deposited in small vessels throughut the circulatory system. If the infusion of thromplastin continues, all the available fibrinogen may e utilized, and a significant disposition to hemorrhage is created.

Russell[1] in 1959 stressed that the successful management of acute hemorrhage in obstetric patients requires a rapid, orderly and systemic sequence of rocedures. He designed a flow sheet to help acomplish this in obstetric coagulation problems.

The purpose of this discussion will be: (a) to numerate the pregnancy complications most often ssociated with hypofibrinogenemia; (b) to discuss he clinical evaluation of fibrinogen levels; (c) to urvey our experience with hypofibrinogenemia in the Department of Obstetrics and Gynecology at the University of Michigan during the eight-year period, 956-1964; and (d) to suggest a protocol for management of patients with the complications responsible for hypofibrinogenemia.

The obstetric complications most often associated with hypofibrinogenemia are abruptio placentae, inauterine fetal death during the second trimester of pregnancy (particularly if the baby died from erythroblastosis fetalis)[2] and amniotic fluid infusion. The latter is a rare, but often fatal complication.

At the Sloane Hospital for women 12 per cent of the cases of hypofibrinogenemia followed postpartum hemorrhage. Hypofibrinogenemia also may develop in women with placenta previa, placenta previa accreta, intrauterine infection, after injection of certain abortifacients into the uterus (especially liquid soap), with hydatidiform mole, after Cesarean section, and even after normal vaginal delivery.

EVALUATION OF LEVEL OF FIBRINOGEN

The normal range of fibrinogen during the last few weeks of pregnancy is 300-600 mg per 100 ml of whole blood. Any level below 100 mg per cent may be associated with a hemorrhagic diathesis. There are four methods by which the fibrinogen level can be determined. All of these tests are valuable; some fit specific clinical circumstances better than others.

Clot Observation Test: Clot observation is a simple qualitative test which can be performed in any hospital. The main defect in this test is that it does not detect minor changes. A five milliliter sample of blood is placed in a test tube and observed for clotting. Under normal conditions a clot forms within six minutes and retracts to 30-40 per cent of the original volume in one hour. The clot is firm and withstands shaking. If the blood fails to clot within six minutes, or if the clot that does form is soft and subsequently disintegrates, the clotting mechanism is defective.

If a stable clot forms in less than six minutes, the fibrinogen level is probably greater than 150 mg per

The Author
Joseph S. Betts, M.D.

Doctor Betts, associated with the Department of bstetrics and Gynecology at the University of Miigan School of Medicine, is now with the Kimough Army Hospital, Fort George G. Meade, Maryland.

Proper management of all medical emergencies requires preparation prior to the emergency. This article completely discusses the diagnosis and treatment of the obstetrical catastrophies most commonly complicated by hypofibrinogenemia. Emphasis is placed upon having an orderly preconceived plan for management of these complications. Several case reports are included from the experience of the Department of Obstetrics and Gynecology at the University of Michigan Medical Center.

cent. If a clot fails to form within 30 minutes, the level is less than 100 mg per cent. A fragile clot which fails to retract is evidence of a reduction in fibrinogen, but the exact level cannot be determinied by this test.

Fibrindex Test: The Fibrindex test* is simple to perform and interpret. Fifty units of thrombin are mixed with 1 ml of oxalated blood and observed for clotting. In contrast to the clot observation test, any clot formation within one minute after mixing indicates that the patient has a fibrinogen level of at least 100 mg per cent. If there is no clot formation in one minute, the test is said to be positive; the fibrinogen level is below 100 mg per cent. This test is always run in parallel with the blood of a normal pregnant patient which serves as a control. Because the Fibrindex test may be done rapidly, and because it has a definite endpoint, it is more useful in an emergency than the clot observation test.

Quantitative Fibrinogen Level: Neither the clot observation test nor the Fibrindex test measures actual plasma fibrinogen levels, so neither can be used to measure changes in fibrinogen concentration over a period of time which would permit us to anticipate clotting abnormalities before they actually develop. Both the quantitative fibrinogen level and the fibrin titre technique described by Schneider[7] can be utilized for this. The quantitative fibrinogen level is complicated, taking at least an hour to run, and few hospitals are able to do it on either a serial (several on one case) or emergency (night or weekend) basis.

Fibrin Titre Technique: The fibrin titre technique (Table I) is a simple serial dilution of whole blood with thrombin added as a catalyst. The dilutions are so adjusted that each dilution correlates with milligrams per cent of fibrinogen in whole blood. If clotting occurs through the fifth tube, the titre is 1:200 and the patient has at least 200 mg per cent fibrinogen, but less than 400 mg per cent, and so on. This test can be performed easily, with results available in 20 minutes. The semiquantitative fibrin titre is the best test available for serial evaluation of fibrinogen levels in an acute situation when the development of hypofibrinogenemia might be anticipated.

UNIVERSITY OF MICHIGAN EXPERIENCE (1956-1964)

Between January 1, 1956, and December 30, 1963, 14,000 women were delivered in the Women's Hospital of the University of Michigan Medical Center and hypofibrinogenemia was diagnosed ten times. Hypofibrinogenemia was recognized in nine women with severe abruptio placentae and in one with an intrauterine fetal death. Two other patients, one with amniotic fluid infusion and another with postpartum hemorrhage from uterine atony, were delivered elsewhere and transferred to the medical center for treatment of the complication.

The clinical course of each of these 12 patients is summarized in Table II. Case summaries of patients with abruptio placentae, intrauterine fetal death, postpartum hemorrhage, and the amniotic fluid infusion syndrome are presented, and a protocol for management of these obstetric complications is suggested.

ABRUPTIO PLACENTAE

Case Summary: G.B. 265643, age 21, Caucasian, Gravida 3, Para 2, type O Rh negative, was admitted

TABLE I.
Fibrin Titre Technique

Purpose:	Rapid, semiquantitative fibrin determination.
Materials:	Rack of Kahn tubes, (1 ml) tuberculin syringe, Topical thrombin solution (20 units thrombin per drop of 50% glycerol-water solution), and Ringer's solution.
Method:	(1) Place Ringer's solution in tubes: #1 tube—0 ml; #2 tube—3 ml; #3 tube—4 ml; and 1 ml to each of the others up to a total of 8 tubes. (2) Draw 1 ml blood with tuberculin syringe. (3) Place 0.5 ml blood in first tube. (4) Place 0.5 ml blood in tube #2, mix and transfer 1 ml to tube #3, mix and transfer 1 ml to next tube; repeat with each succeeding tube. (5) Add 20 units (1 drop) topical thrombin to each tube and tilt each once. (6) Read titre in 15-30 minutes. Dilutions are 1:10, 1:50, 1:100; 1:200; 1:400; 1:800; and 1:1600.
Reading:	Titre values of 50, 100, 200, etc., correlate fairly well with mg per 100 ml of plasma.

---

*Fibrindex Ortho Pharmaceutical Corporation, Raritan, New Jersey.

at term soon after she was awakened by severe abdominal pain and moderate bright vaginal bleeding. Her blood pressure on admission was 90/60, the pulse rate was 120/minute, and fetal heart sounds could not be heard. The blood pressure dropped to 40/0 but, responded to intravenous saline, Trendelenburg position and blood transfusions. The urine was clear yellow with 1+ protein reaction. A fibrin titre was positive at 1:400. Palpation of the abdomen revealed a rigid, irritable, tender uterus. The cervix was soft, 2 cm dilated and the head was at station -3. The membranes were artificially ruptured.

During the next two hours, the patient was given 2000 ml of whole blood. There was little visible bleeding, but the pulse remained above 100 and the blood pressure about 90/60. The fibrin titre dropped progressively to 1:50 and she was given a rapid intravenous infusion of 6 gm of fibrinogen. Since labor had not progressed, she was delivered of a 7 lb stillborn male infant by Cesarean section. The placenta had separated completely. Because of continued depression of the titre (1:100) and bleeding, the patient was given 2 more gm of fibrinogen after which recovery was uneventful.

Management of Severe Abruptio Placentae: The clinical diagnosis of acute severe abruptio placentae is generally made on the basis of abdominal pain associated with a tender, irritable, sometimes rigid uterus in the third trimester of pregnancy, with or without bright red vaginal bleeding.

The infant usually dies shortly after the placenta separates, but the inability to hear the heart sounds is not definite proof of fetal death. A fetal electrocardiogram may be helpful in determining whether the infant is alive. This examination should not be performed until the condition of the mother has been assessed and her treatment started.

The first step in the management of a patient suspected of having premature placental separation is to draw blood for hematocrit, cross-match and clotting studies. Blood loss can be massive (greater than 3000 ml), and one must be prepared to administer large quantities of blood rapidly. An intravenous infusion of saline is started through a 15 gauge needle or a large cannula which is inserted when blood is drawn for preliminary laboratory examinations.

Sterile vaginal examination is performed to determine fetal position and the status of the cervix. The membranes are artificially ruptured to induce or stimulate labor and also in an attempt to diminish thromboplastin dissemination into the circulation. Presumably, evacuation of amniotic fluid effectively compresses retroplacental sinusoids and therefore reduces the rate at which thromboplastin from the necrotic decidua and retroplacental clot enters the maternal circulation. The membranes should usually be ruptured even though the conditions are unfavorable by the usual criteria. An indwelling Foley catheter is placed in the bladder in order to permit periodic determination of urinary output.

Table III presents an outline for the management of abruptio placentae. If delivery is not imminent, the fetal heart sounds are normal, and the pregnancy is of at least 35 weeks' duration, an immediate Cesarean section is indicated in the interest of the baby. If the heart sounds are irregular, or if there is ques-

TABLE II.

					Blood Type			Therapy			Outcome	
Patient	Age	G/P	Gestation	Complication	ABO	RH	Fibrinogen	Blood	Fibrinogen	Delivery	Fetal	Maternal
938215 D.M.	24	1/0	37 weeks	Abruptio Placentae	O	Pos.	Fibrindex 90 mg. %	2 U	6 gm.	Vaginal	Stillbirth	Good
604633 B.D.	25	3/2	36 weeks	Abruptio Placentae	O	Pos.	Fibrindex	2 U	6 gm.	Vaginal	Stillbirth	Good
908910 P.V.	21	2/1	39 weeks	Abruptio Placentae	A	Neg.	Fibrindex 80 mg. %	2 U	6 gm.	Vaginal	Stillbirth	Good
296200 V.L.	23	4/3	33 weeks	Abruptio Placentae	A	Neg.	"No Clot"	7 U	6 gm.	C/S	Stillbirth	Good
285865 C.L.	22	3/2	34 weeks	Abruptio Placentae	A	Neg.	Titre 1:10	5 U	8 gm.	C/S	Stillbirth	Good
265643 G.B.	21	3/2	39 weeks	Abruptio Placentae	O	Neg.	Titre 1:10	5 U	8 gm.	C/S	Stillbirth	Good
992877 E.S.	39	2/1	38 weeks	Abruptio Placentae	B	Neg.	"No Clot"	0	0	C/S	Good	Good
038088 R.H.	30	2/0	40 weeks	Abruptio Placentae	AB	Neg.	Titre 1:100 70 mg. %	2 U	0	C/S	Good	Good
944804 A.G.	25	2/1	28 weeks	Intrauterine Fetal Death	O	Neg.	90 mg. %	0	0	Vaginal	Stillbirth	Good
597991 D.C.	47	8/7	40 weeks	Abruptio Placentae	O	Pos.	"No Clot"	8 U	6 gm.	Vaginal	Fair	Good
458820 B.R.	29	1/0	40 weeks	PPH from Uterine Atony	O	Neg.	Fibrindex	16 U	5 gm.	Vaginal	Good	Good
047793 E.M.	43	8/7	43 weeks	Amniotic Fluid Embolism	AB	Pos.	"No Clot"	6 U	6 gm.	Vaginal	Poor	Fatal

tion as to the condition of the infant, emergency Cesaran section should usually not be done because the infant will either be born dead or may have suffered extensive damage from anoxia.

If the uterus is tender and rigid and the fetus is dead, blood transfusion is indicated even though there has been little visible bleeding. As much as 3000 ml of blood can be concealed within the uterus, and if one waits for evidence of shock before starting transfusion, a coagulation defect, renal failure, or even death may result. Initially 1000 ml of whole blood, plus an amount equal to the visible blood loss is administered. Thereafter, blood replacement is based on the patient's vital signs, the amount of external bleeding, serial hematocrits and blood volume studies.

As the blood transfusion is being started, 8 gm of fibrinogen should be obtained and the diluent warmed to room temperature. The operating room must be notified that there is a possibility of an emergency Cesarean section. An anesthetist should be available.

If the Frindex test is negative (normal clotting), a quantitative test for fibrinogen should be ordered because the actual concentration may be considerably reduced even though the Fibrindex test indicates normal clotting. Fibrinogen determinations should usually be repeated, even though the initial reading is normal, because the concentration is likely to fall progressively until the uterus is emptied.

Labor may begin promptly and terminate rapidly after artificial rupture of the membranes, but if it does not, oxytocin stimulation should be considered. Stimulation should be carefully monitored since uterine response may be unpredictable. However, effective labor can usually be induced even though massive myometrial hemorrhage has occurred. If the vital signs can be kept stable by transfusion and if the hemostatic mechanism remains intact, it is safe to observe closely and await vaginal delivery.

Cesarean section is indicated when delivery does not appear to be imminent and any of the following are present: an abnormal clotting mechanism, continued bleeding requiring transfusion, or a progressive fall in blood fibrinogen levels. If the level is above 100 mg per cent when the operation is performed, it usually is not necessary to give additional fibrinogen. If the level is less than 100 mg per cent, however, 6 gm of fibrinogen should be administered immediately prior to operation.

If one elects to replace fibrinogen and await delivery, the fibrinogen level must be checked at least every two hours. Dysfunctional labor is a contraindication to vaginal delivery unless it responds promptly to oxytocin stimulation. A long time lapse may necessitate the injection of large amounts of fibrinogen, with the real danger of subsequent serum hepatitis if the patient survives. In addition, hemorrhage into vital organs, especially the brain, with extensive destruction of irreplaceable tissue, may occur unless the coagulation defect is corrected. After the placenta is removed, the liver rapidly replenishes fibrinogen at the rate of about 350 mg per hour.

INTRAUTERINE FETAL DEATH

Case Summary: A.G. 944804, age 25, Caucasian Gravida 2, Para 1, type O Rh negative, had an initia Rh anti D indirect Coombs antibody titre of 1:2048 She also had overt diabetes which had become manifest during this pregnancy. The values of a glucos tolerance test were fasting blood sugar 100 mg pe

TABLE III.
Abruptio Placentae
Third Trimester Management

Diagnosis Is Made by:	Initial Management:	Plan for Delivery:
		VAGINAL DELIVERY Fetus Alive Progressive Labor Minimal Clotting Derangement Replaceable Bleeding Stable Vital Signs
Abdominal Pain	Rupture Membranes	Fetus Dead Progressive Labor
Tender Irritable Uterus	Fibrindex Followed By Serial Titres	Correctable Clotting Derangement Replaceable Bleeding
		CESAREAN SECTION
Vaginal Bleeding	Blood Transfusion If Indicated	Fetus Alive Poor Labor Progressive Fall in Titres Continued Bleeding
		Fetus Dead Poor Labor Progressive Fall in Fibrinogen Titre Fibrinogen <100 mg. % Profuse Bleeding

cent and two hour 200 mg per cent. Her first infant had died in utero at the 37th week of pregnancy. During this pregnancy, fetal heart tones were never heard after the 24th week. Repeated quantitative fibrinogen determinations demonstrated a drop from 190 mg per cent at the 26th week to 90 mg per cent at the time of delivery at the 28th week. However, there was no excessive bleeding and no replacement was necessary.

Management of Intrauterine Fetal Death: Fetal death in utero in the first trimester of pregnancy is rarely complicated by clotting abnormalities. However, hypofibrinogenemia develops in one-third of patients if fetal death occurs after the 16th week and the products are retained longer than four weeks.[2]

Dilation and curettage has been our usual management of missed early abortion if the products are not expelled spontaneously. Before the curettage is carried out, the patient's clotting status must be assessed by measuring the fibrinogen concentration and bleeding, clotting and prothrombin times.[8] If no clotting abnormality is apparent, then the procedure can usually be carried out with safety. 1000 ml of fresh whole blood and 8 gm of fibrinogen should be in the operating room before the procedure is begun.

The accepted management of late intrauterine fetal death has been observation until the spontaneous onset of labor. Until recently, there has been no safe method of inducing labor in these cases. Now, in properly selected cases, we can induce labor, with relative safety, by injection of a hypertonic salt solution into the amniotic sac. When a late intrauterine fetal death has occurred, we assess the clotting mechanism each week. We induce labor with intra-amniotic hypertonic saline if it does not occur spontaneously after three weeks of fetal death.

If a clotting defect is discovered, it must be corrected before any procedures to empty the uterus are attempted.

POSTPARTUM HEMORRHAGE

Case Summary: B.R. 058820, age 29, Caucasian, Gravida 1, Para 0, type O Rh negative, delivered a healthy term infant in another hospital after an uncomplicated atenatal course and a two-hour labor. She immediately began to bleed profusely, presumably from an atonic uterus and two vaginal lacerations. After 10 units of blood had been administered, her blood failed to clot and a Fibrindex test showed a coagulation defect. Two grams of fibrinogen were administered, and the uterus was removed. During the operation, she was given more blood and fibrinogen because of bleeding from the pedicles. Postoperatively, she developed pulmonary edema and renal failure and was transferred to the University of Michigan Medical Center where she developed a pelvic abscess, sacral palsy and pyelonephritis from which she was recovering when she was discharged nine weeks after delivery.

Management of Postpartum Hemorrhage: Postpartum hemorrhage occurs frequently, and its treatment is well outlined in standard obstetric texts. The hemorrhage can usually be controlled by evacuating the uterine contents, massage, uterine elevation and oxytocics. Continued bleeding indicates the need for re-examination in search of an overlooked uterine, cervical or vaginal laceration. Blood loss must be replaced immediately to avoid permanent damage of vital organ systems.

Hypofibrinogenemia may develop if the hemorrhage is severe and is a result of intravascular coagulation or because of activation of a fibrinolytic system. The fibrinogen level should be checked if hemorrhage cannot be controlled by the usual measures. If the level is found to be 100 mg per cent or less, then 4 gm of fibrinogen should be infused.

Large doses of intravenous oxytocics, combined with vigorous massage and parametrial compression, will usually control the bleeding. If it continues despite these measures and the clotting status is normal or corrected to normal, then an immediate laparotomy with bilateral hypogastric ligation and/or hysterectomy should be carried out.

AMNIOTIC FLUID INFUSION

Case Summary: E.M. 047793, age 43, Caucasian, Gravida 8, Para 7, type AB Rh positive, was admitted to another hospital for elective induction of labor at 43 weeks of pregnancy. Soon after the membranes were artificially ruptured and oxytocin was begun, the patient became dyspneic and cyanotic. The blood pressure could not be obtained and she soon became comatose. After two hours, during which blood pressure was maintained with vasopressors, she delivered an 11-pound stillborn infant. Immediately after the delivery of the placenta, she had a massive hemorrhage of blood which did not clot. The patient was still comatose and had developed a hemiparesis. After receiving multiple transfusions, vasopressors, fluids and 6 gm of fibrinogen, she was transferred to the University of Michigan Medical Center where shortly after arrival she died. An autopsy was performed, and the primary pathological diagnosis was amniotic fluid infusion.

Management of Amniotic Infusion Syndrome: Fortunately, this syndrome is rare. About 25 per cent of patients who develop it expire before any treatment can be instituted, and in those who survive the diagnosis cannot be proven. The clinical picture is thought to be due to a combination of sudden mechanical blockade of the pulmonary vascular tree and an anaphylactoid reaction to particulate material in amniotic fluid.[6]

The typical case occurs in an elderly multipara who delivers a large baby after a rapid labor. She suddenly, and without apparent reason, develops acute respiratory distress and a shock-like state. The differential diagnosis includes other forms of embolism, ruptured uterus with hemorrhagic shock, aspiration of vomitus, eclampsia, idiosyncrasy to anesthetic drug, cerebral vascular accident, acute pulmonary edema and spontaneous pneumothorax. If the amniotic infusion syndrome is suspected, a multiple treatment program should be instituted immediately. Oxygen with 1 per cent isuprel is administered with positive pressure which will help counteract anoxia as well as bronchiospasm and pulmonary arteriolar spasm. Atropine Sulfate 0.4 mg intravenously will inhibit the reflex vagal tone, and ephedrine sulfate 25 mg intravenously will help maintain systemic blood pressure without constricting the pulmonary vasculature. Solu-Cortef 1.0 gm given intravenously will inhibit the anaphylactoid reaction. Rotating tourniquets should be used to help diminish right heart strain. Also, an intravenous digitalis preparation is started.

A large proportion of those who survive amniotic fluid infusion for more than one hour will develop hypofibrinogenemia and will hemorrhage from the placental site. Therefore, the fibrinogen concentration should be determined at 20-minute intervals, and fibrinogen administered if the level falls to 100 mg per cent or lower.

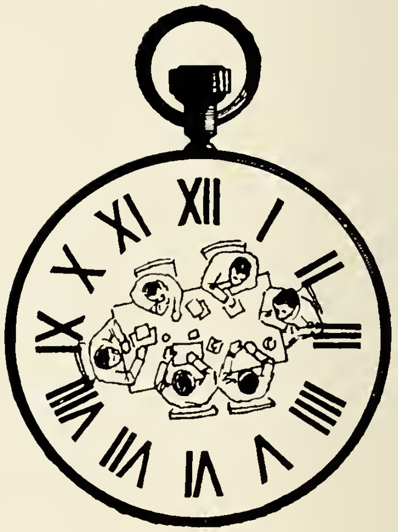
Lost blood must be replaced with fresh whole blood, taking care not to overload the cardiopulmonary circulation. A careful record of all treatment should be kept on a separate page of the patient's chart, especially in the first hour or two after the initial insult.

SUMMARY

The problem of managing acute hemorrhage in the obstetric patient presents a challenge to every physician. This paper stresses the need to suspect the presence of a coagulation defect in these patients. Means for clinically evaluating the clotting mechanism have been outlined. Management has been suggested for hypofibrinogenemia with abruptio placentae, postpartum hemorrhage, intrauterine fetal death and the amniotic infusion syndrome.

REFERENCES

1. Caillouette, J. C., Longo, L. D., and Russell, K. P.: Flow sheet for use in obstetric complications. J.A.M.A., 170:1520, 1959.
2. Goldstein, D. P., Johnson, J. P., and Reid, D. E.: Management of intrauterine fetal death. Obstet. Gynec., 21:523, 1963.
3. Phillips, L. L.: Unexpected cases of hypofibrinogenemia. Amer. J. Obstet. Gynec., 84:429, 1962.
4. Reid, D. E., and Weiner, A. E.: Coagulation deaths with intrauterine fetal death from RH isosensitization. Amer. J. Obstet. Gynec., 60:1015, 1950.
5. Reid, D. E., and Weiner, A. E.: Intravascular clotting and afibrinogenemia, the presumptive lethal factors in the syndrome of amniotic fluid embolism. Amer. J. Obstet. Gynec., 66:465, 1953.
6. Russell, W. S., and Jones, W. N.: Amniotic fluid embolism. Obstet. Gynec., 26:476, 1965.
7. Schneider, C. L.: Rapid estimation of plasma fibrinogen concentration and its use as a guide to therapy of intravascular defibrination. Amer. J. Obstet. Gynec., 64:141, 1952.
8. Spraitz, A. F., Jr., Welch, J. S., and Wilson, R. B.: Missed abortion. Obst. Gynec., 87:877, 1963.
9. Weingold, A. B., Seigal, S., and Stone, M. L.: Intra-amniotic hypertonic solutions for induction of labor. Obstet. Gynec., 26:622, 1965.



Postgraduate medical education must be a continuing process—every hour around the clock and every day of the week.

The major postgraduate medical experience offered each year by the Michigan State Medical Society is its annual fall Scientific Session. The 1966 program will be offered in Grand Rapids September 27-28-29-30. Every physician is urged today to block out his calendar so he will be able to hear national medical authorities helping him to practice better in his home community.

Berrien Doctors Provide Care for Migrant Families

By Peter Hoheisel
of MSMS Staff

Each year thousands of migrant workers in trucks and jalopies ramble into the southwestern corner of Michigan to Berrien, Cass, and Van Buren counties.

Spanish speaking and gypsy-like in their traveling abits, the migrants usually are members of large amilies. Everyone pitches in to harvest the crops f asparagus, grapes, and strawberries, which ripen t different times throughout the spring, summer, and all.

At their peak there are 39,000 migrants in the area. he average number is about 15,000.

Who is responsible for the health of the migrants? fter all, they move from county to county and state o state. It is easy to say: "They're only here a few onths. They're not our responsibility."

Thirty physicians in the tri-county area have reected this ostrich-like philosophy. They have esablished three clinics—at Keeler, Sodus, and Locata, owns which are located near all the main camp reas.

Speaking of the program, D. Kent Hassan, M.D., resident of Berrien County Medical Society, says, Our county society is offering full cooperation with his program. We feel that it is serving a real need n this area."

On a rotating basis, the 30 volunteer physicians go ut to the clinics to treat the lines of people who await he doctor's arrival. At Keeler, the physician someimes treats as many as 30 people a night.

By 6:30 p.m. the waiting room is already crowded. he physician arrives at 7:30. Each person who vants to see the doctor has been registered and preared by the public health nurses and a Spanishpeaking interpreter.

Besides the obvious benefit of the program to the igrant, the project is also a service to the local hysicians because it evenly distributes the use of the vailable medical skill in the tri-county area.

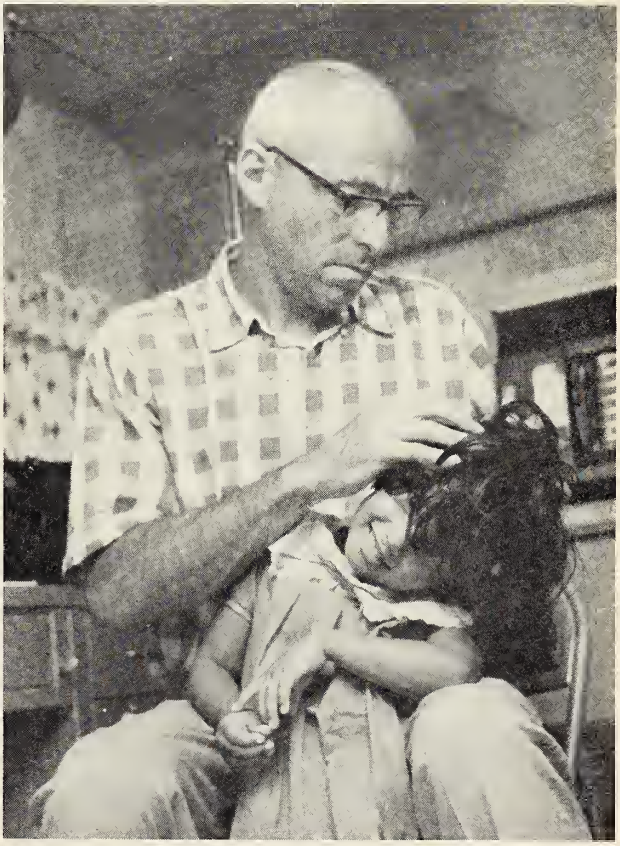
"We haven't yet licked some of the hardest problems—such as the difficulty in keeping complete medical records on the migrants, but we have taken the first steps," observed Robert Locey, M.D., tri-county public health director.

When Jose or Manuel brings his family to the tri-county area he brings his own attitude toward doctors. He doesn't drop in for a check-up. When he or his children have a bad cold he doesn't see the doctor. He goes when it is serious—and when nothing else works. And even then reluctantly.

"This is not from any lack of love or concern for their children," continued Dr. Locey, "In fact these people have strong family ties."

"Sometimes the physician sees sicknesses which he has known only in a textbook," points out Dr. Locey, "Things like hookworm and polio—one polio case we had was so bad the boy had no coordinating ability when we saw him. Now after seeing a pediatrician, he's been put on physical therapy and will probably have no residual paralysis. When you see such progress it is most gratifying."

The problems of the migrant in Michigan—his education, housing, and health—are not easily solved. The clinics, supported by a federal grant, are effective—especially when so many local physicians cooperate.



James Skinner, M.D., of St. Joseph, treats one of the children of the migrant workers in the health clinic.

new

"Doctor, when the kids
act up and nothing goes right,
I get these throbbing
pains in the back of my head."

a new formulation that relieves pain in tension headache and neuralgia

Dialog is a combination of 15 mg allobarbital and 300 mg acetaminophen. Allobarbital, a proven barbiturate, provides desirable sedation in patients experiencing pain and discomfort. Acetaminophen is a nonsalicylate analgesic-antipyretic, well tolerated and useful in a wide range of mildly painful and febrile conditions.

Dialog is well tolerated, even by those sensitive to aspirin. It is nonirritating to the gastrointestinal tract and has no adverse effects on the kidneys.

- Raises the pain threshold
- Suppresses the pain-producing mechanism
- Reduces emotional tension

2/3453MK—2

Many overweight patients can benefit from the appetite control provided by the sustained anorexigenic-tranquilizing action of BAMADEX SEQUELS: anorexigenic action of amphetamine; tranquilizing action of meprobamate; prolonged action through sustained release of active ingredients.

Bamadex® Sequels®

DEXTRO-AMPHETAMINE SULFATE (15 mg.) WITH MEPROBAMATE (300 mg.) SUSTAINED RELEASE CAPSULES

to help establish a new dietary pattern

Contraindications: Dextro-amphetamine sulfate: in hyperexcitability and in agitated prepsychotic states. Previous allergic or idiosyncratic reactions to meprobamate.

Precautions: Use with caution in patients hypersensitive to sympathomimetic compounds, who have coronary or cardiovascular disease, or are severely hypertensive.

Dextro-amphetamine sulfate: Excessive use by unstable individuals may result in psychological dependence.

Meprobamate: Careful supervision of dose and amounts prescribed is advised, especially for patients with known propensity for taking excessive quantities of drugs. Excessive and prolonged use in susceptible persons, e.g. alcoholics, former addicts, and other severe psychoneurotics, has been reported to result in dependence on the drug. Where excessive dosage has continued for weeks or months, reduce dosage gradually. Sudden withdrawal may precipitate recurrence of preexisting symptoms such as anxiety, anorexia, or insomnia; or withdrawal reactions such as vomiting, ataxia, tremors, muscle twitching and, rarely, epileptiform seizures. Should meprobamate cause drowsiness or visual disturbances, reduce dosage and avoid operation of motor vehicles, machinery or other activity requiring alertness. Effects of excessive alcohol consumption may be increased by meprobamate. Appropriate caution is recommended with patients prone to excessive drinking. In patients prone to both petit and grand mal epilepsy meprobamate may precipitate grand mal attacks. Prescribe cautiously and in small quantities to patients with suicidal tendencies.

Side Effects: Overstimulation of the central nervous system, jitteriness and insomnia or drowsiness.

Dextro-amphetamine sulfate: Insomnia, excitability, and increased motor activity are common and ordinarily mild side effects. Confusion, anxiety, aggressiveness, increased libido, and hallucinations have also been observed, especially in mentally ill patients. Rebound fatigue and depression may follow central stimulation. Other effects may include dry mouth, anorexia, nausea, vomiting, diarrhea, and increased cardiovascular reactivity.

Meprobamate: Drowsiness may occur and can be associated with ataxia; the symptom can usually be controlled by decreasing the dose, or by concomitant administration of central stimulants. Allergic or idiosyncratic reactions: maculopapular rash, acute nonthrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever, transient leukopenia. A case of fatal bullous dermatitis, following administration of meprobamate and prednisolone, has been reported. Hypersensitivity has produced fever, fainting spells, angioneurotic edema, bronchial spasms, hypotensive crises (1 fatal case), anuria, stomatitis, proctitis (1 case), anaphylaxis, agranulocytosis and thrombocytopenic purpura, and a fatal instance of aplastic anemia, but only when other drugs known to elicit these conditions were given concomitantly. Fast EEG activity, usually after excessive dosage. Impairment of visual accommodation. Massive overdosage may produce drowsiness lethargy, stupor, ataxia, coma, shock, vasomotor and respiratory collapse.

Lederle

LEDERLE LABORATORIES
A Division of American Cyanamid Company,
Pearl River, New York

695-6

Automobile owners can do much to promote safety, especially in the area of what is called the "second collision"—what happens to the passenger inside the automobile after the crash. So says Ralph R. Cooper, M.D., Detroit, a past president of the Wayne County Medical Society and a MSMS councilor.

"I recommend a crash helmet, shoulder harness, and whiplash pad as the best protection available today to avoid second collision injuries," says Doctor Cooper.

"When I am driving," he continued, "I always use these safety features. The helmet isn't uncomfortable, incidently. I find it difficult to convince my wife and daughter to use it, however, because of the strange looks we get from passing motorists."

Doctor Cooper got interested in the safety helmet when one of his patients had an accident while driving her 14-year-old son to a hockey game. The boy's head crashed through the windshield, but because he had on his hockey helmet, he escaped totally uninjured.

* * *

Fred Lindenfeld, M.D., Niles, is now chairman of the Berrien County Red Cross.

* * *

Speakers at the Michigan Commission on Aging Conference on Nursing Needs included Robert R. Leichtman, M.D., Pontiac; and Oscar D. Stryker, M.D., Mt. Clemens.

* * *

A recognition plaque recently was given by the Kent County Chapter, Muscular Dystrophy Association to Robert H. Puite, M.D., Grand Rapids, medical director for six years.

* * *

Robyn J. Arrington, D.C., and Waldo L. Cain, M.D., both of Detroit, were honored by the Detroit Medical Society to share the "physician of the year" award. They were cited for their part in establishing the new Boulevard General Hospital in Detroit.

Personal Mention:

A "Volunteer Leadership Award" was presented by the community of Bellaire to John Rodger, M.D., Bellaire physician and community worker. He was cited for 12 years as school board trustee, church leader, traffic safety expert and medical organizational worker.

* * *

James R. Driver, M.D., Ann Arbor, has joined the staff of Mercywood Hospital, Ann Arbor, as a staff psychiatrist.

* * *

Frank T. Balaga, M.D., and A. J. Vorwald, M.D., both of Detroit, have been appointed to the Wayne County Air Pollution Appeals Board.

* * *

Donald R. Korst, M.D., Ann Arbor, has moved to Madison, Wisconsin, as associate professor of internal medicine in the University of Wisconsin Medical School. He has the position of director of education in internal medicine at the Madison General Hospital. While in Ann Arbor he was assistant professor of medicine and chief of the radioisotope service at the Veterans Administration Hospital from 1955-1961 and was head of the department of hematology and chemotherapy at St. Joseph Mercy Hospital from 1961-1965.

* * *

R. C. Conybeare, M.D., Benton Harbor, is now the president of the Berrien County chapter of the Michigan Society for Mental Health.

* * *

A citation from the AMA was given recently to Alfred B. Swanson, M.D., Grand Rapids, for his work in Viet Nam. In the August issue an error was made in the name of the recipient of the award.

* * *

Recent placement, by the M.D Placement Service of the Michigan Health Council have included the following: Oscar A. Soto, M.D. (Roseville); Joon Park, M.D., (Lansing); Leonard Price, M.D., (Ferris State College-Big Rapids); Julian Allen, M.D., (Pontiac State Hospital); Lendall Archer, M.D., (Gladwin-Locum Tenens); Max Urban M.D., (Caro); Douglas Van Brocklin, M.D., (Allegan); Willard Beattie, M.D.,, (Addison-Locum Tenens); Anton Zadurowycz, M.D. (Birch Run); Harry Mayhew, M.D. (Northville State Hospital); Howard Romack, M.D., (V.A. Hospita -Iron Mountain).

* * *

E. S. Gurdjian, M.D., professo and chairman of Wayne State University's department of neurosurgery and director of WSU's Biomechanic Research Center, will direct research relating to physiological data acquisition and analysis. This information is vital to understanding how a driver reacts with the highway environment. The experiment is par of a complex program, the first o its kind, analyzing and measuring the interacting relationships of the car, the driver, and the highway and is directed by the American Academy of Transportation, a new organization, located in Ann Arbor.

Michigan MD's In Viet Nam; Need Is Great

A growing number of Michigan physicians are joining physicians from all parts of the United States in volunteering 60 days of service at the 16 hospitals for civilians in the war-torn country of South Vietnam. These men and women are serving the natives who are suffering from malaria, tuberculosis, intestinal parasitism, pneumonia, meningitis and typhoid fever.

The AMA volunteer physicians for Vietnam program places physicians at hospitals in the so-called pacified regions. Most needed are GPs, internists, general surgeons, and orthopedic surgeons. The volunteer receives $10 a day for expense money plus transportation.

For information contact:

AMA Volunteer Physicians for Vietnam
American Medical Association
535 North Dearborn Street
Chicago, Illinois 60610

Conferences Help Coaches, Team Doctors

Encouraged by the MSMS efforts o relate closer the team doctor and he coach, several county medical cieties have sponsored conferences.

The Ionia-Montcalm County Medical Society held a conference or Western Michigan coaches, trainrs, team doctors and school officials n August 20.

The Jackson County Medical Soety conducted its Sports Medicine Conference on August 25.

In both cases, members of the MSMS and AMA Committees on Medical Aspects of Organized Athtics served as speakers, along with ocal physicians.

Challenge for October

By F. J. L. Blasingame, M.D.
AMA Executive Vice President

Community Health Week, October 16-22, is a time for all local members of health professions and health organizations—public, private and voluntary —to conduct community-wide activities emphasizing the continuing theme of the observance—"Teaming Up for Better Health."

Primary objectives of this nationwide observance are to stimulate greater public awareness and appreciation of the wealth of health facilities and services which are available at the community level and to stress the health progress and medical advances which have been made locally through the united efforts of all members of the community health team.

We are again advising national health organizations and state and territorial health departments of our plans and encouraging them to participate actively in the promotion. We also are notifying them that their component local groups may be invited to participate wherever local observances are planned.

Promotional aids for 1966 will be concentrated on two appropriate local themes—the expanding career opportunities in medicine and its allied fields and overcoming preventable disease, with special emphasis on measles immunization and control of VD.

Let's Go Dancing!

Enjoyable music, excellent food and cocktails and warm fellowship will be combined at the MSMS Annual Society Dinner Dance at Grand Rapids, Thursday, September 29.

All members are cordially invited to attend the pleasant social highlight in the main auditorium of the Grand Rapids Civic Auditorium.

Says Mental Health Field Needs Workers

The demand for aid in the mental health field has become so great, reports Raymond W. Waggoner, M.D., director of the University of Michigan Neuropsychiatric Institute, that the classical one-to-one medical relationship is no longer possible for most mental patients.

Although most medical personnel are trained in the state's three major universities, Dr. Waggoner states that additional personnel "qualified to take part in the treatment of the mentally ill patient can be trained in other educational facilities in the state."

MSMS Reprints Hardwick Series; Going to Teachers

"Modern economic planning and decision making has become a partnership between private businessmen and government," observes Clyde T. Hardwick, Ph.D., of the University of Detroit, in a series of articles published recently in a booklet by the Michigan State Medical Society.

The articles first appeared in MICHIGAN MEDICINE between 1962 and 1965.

Because of their lucid presentation of the free enterprise point of view and its relation to the present economic scene, the Medical Society has collected them into a booklet as a public service to physicians, educators, and other interested persons.

Clyde Reed, director of the Institute for Economic Education, Detroit, has already distributed many copies to Michigan educators.

Any physician who wants a copy can get one by writing MSMS, 120 West Saginaw, East Lansing.

"Changing Morals" Among Subjects For Grand Rapids

Physicians are showing considerable interest in an annual MSMS Scientific Session general assembly September 28 at Grand Rapids on "The Doctor's Dilemma in a World of Changing Morals."

The topic is typical of the timely, provocative subjects selected by the Program Committee for the 101st Annual Session, September 27-28-29-30.

"The Changing Morals" panel will offer experts in medicine, law and religion at 4 p.m., September 28. Coming from out of state will be Harold I. Lief, M.D., psychiatry professor at Tulane University, and Francis A. Allen, LL.B., law professor at the University of Chicago. They will be joined by J. Robert Willson, M.D., professor and chairman of the University of Michigan Department of Obstetrics and Gynecology, and Rev. Gerald B. O'Grady, Jr., Rector of the Christ Church at Cranbrook, Bloomfield Hills, and Stuart M. Finch, M.D., U-M psychiatry professor and chief of the Children's Hospital Psychiatric Service.

Copies of the Annual Session program have been mailed to every member. Any member wishing an extra copy may write to MSMS, 120 West Saginaw, East Lansing.

Doctors, Clinics Immunize for Measles

To supplement the efforts of physicians in private practice, measles vaccine has been added to the list of routine immunizations available through the Detroit Health Department's Neighborhood Immunization program available at the city centers. Measles shots are given free by the city only to preschool children, but there is no age restriction for polio, smallpox, diphtheria, or whooping cough vaccines.

THE BEGINNING OF
MEDICAL EDUCATION

Members of the woman's auxiliaries of the Michigan State Medical So-ciety, across the state, have played a key role in the travels of the Michigan Healthmobile. The medical-museum-on-wheels is sponsored each week by a different county medical society, with the wives of the physicians manning the mobile unit as guides. Here, Mrs. Hugh Allott, wife of a Sault Ste. Marie physician, describes some of the interesting visitors and provocative questions to Ralph T. Wills, MSMS director of community relations. (Sault Ste. Marie Evening News Photo)

National Speakers For Diet Therapy

The 4th Annual Conference on Nutrition and Diet Therapy in Michigan is all set for September 27-28 in conjunction with the MSMS Annual Session. MSMS is a co-sponsor with the Michigan Department of Public Health with the three medical schools as cooperating institutions.

Coming to participate on the program with Michigan authorities will be David H. P. Streeten, M.D., Syracuse University, on "Hypoglycemia"; Arnold Lazarow, M.D., University of Minnesota, on "The Nature of Diabetes"; E. Neige Todhunter, Ph.D., University of Alabama, on "Genetics and Nutrition"; Sarah C. Stulb, M.P.H., Washington, D. C., on "Diabetic Diet Counseling"; and Selma E. Snyderman, M.D., New York University, on "Principles of Diet Therapy in Hereditary Metabolic Diseases."

Thousands View Healthmobile at Big State Fair

Thousands of people studied th marvels of medical advancement a they toured the MSMS Healthmobile at the Michigan State Fair i Detroit. The traveling-health-museum-on-wheels was one of the nev features at the fairgrounds this year

The Healthmobile—viewed b more than 100,000 since its dedication last September at the MSM Centennial—has been a popular attraction at several fairs this summer

A total of 35 county medical societies have now sponsored the appearance of the educational Healthmobile in their communities, with th excellent cooperation of the Woman' Auxiliaries.

octor's Day uncheon Set y Auxiliary

Garfield Tourney, M.D., director Lafayette Clinic, will speak on Hypnotism: Fad, Fallacy or Fact" the Doctor's Day Luncheon, hursday, September 29, the last ay of the Woman's Auxiliary An- ual Convention.

On Tuesday, September 27, the nvention begins at 11 a.m. at the antlind Hotel in Grand Rapids. At 30 p.m. there will be a board meet- g and planning session. In the eve- ng, at 6:30 p.m., the Past State esidents and Secretaries will have eir dinner.

Wednesday, September 28, at 8:45 m. the convention will have its for- al opening, and reports of county esidents will be given. A fashion ow will follow luncheon, and the ternoon will be devoted to more ports of the county presidents. At 30 p.m. will be the Dinner Dance onsored by the Michigan State edical Society.

The convention will close Thurs- ıy after Dr. Tourney's talk.

ffer Medicare Speakers

MSMS speakers are available to unty medical societies and hospitals the general subject of Medicare d Medicaid. Component societies ould make their requests directly MSMS headquarters. Every at- mpt will be made to secure a eaker for your meeting.

n Liaison Group

Three pharmacists have been ap- inted to serve on the MSMS- SPA Liaison Committee for the ming year. Included in the ap- intment by Richard J. Dillion, Ph., President of the Michigan ate Pharmaceutical Association, are illiam B. Hennessy, R.Ph., East De- it, Co-Chairman; Stanley J. Bying- n, R.Ph., Grand Rapids, and Hen- ng W. Engmark, R.Ph., Jackson.

Robinson Leads In School Election

Remus G. Robinson, M.D., Detroit, led his opponents in the nominating election held August 2 for the Detroit School Board. The final election, to be on November 8, will determine which of the four nominees will fill the two-seat vacancy.

Dr. Robinson has served two six-year terms, and formerly served as president. His present term expires June 20, 1967.

WSU Invitation:

The Wayne State University School of Medicine Alumni Association will have a hospitality suite at the Pantlind Hotel. A special reception for all alumni, faculty, and friends will be held on Wednesday, September 28, from 4 to 6 p.m. Representatives of the university will be in attendance. The headquarters suite will be maintained on Tuesday, Wednesday and Thursday, September 27-29.

PR Committee Conducts Speech Training Event

Over 30 physicians attended a one-day workshop on public speaking at Northland Inn on August 24.

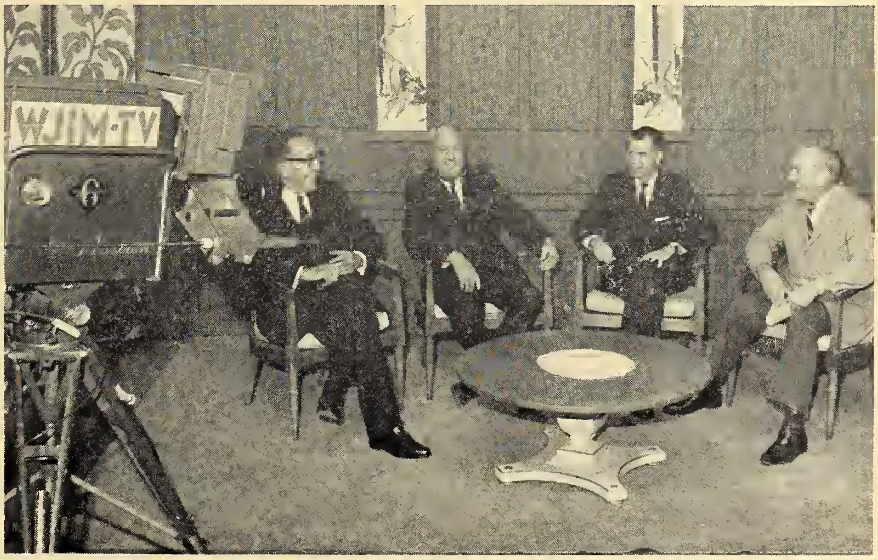
Smith, Kline, and French Laboratories Speaker Training Service of Philadelphia conducted the workshop under the leadership of Robert Haakinson, Ph.D., head of Speaker Training.

From 9 a.m. to 5 p.m. the physicians studied principles of effective speech delivery, reading of manuscripts, handling questions and answers, speech organization, and small group extemporary speaking.

The participants all agreed that the small investment of time was well worth the sharp grasp of the dynamics of public speaking which they developed.

This new MSMS service project was conducted by the MSMS Public Relations Committee with Brock E. Brush, M.D., Detroit, as chairman.

Listener interest reportedly was high for a WJIM-TV program, "Formula for Medicare and Medicaid" presented by the Michigan Association of the Professions over the Lansing station. Answering the questions and discussing the new health care programs were, left to right, John M. Wellman, M.D. Lansing, President of Michigan Medical Service; R. Bernard Houston, Director, Department of Social Services; A. J. Neerken, M.D., Kalamazoo, Chairman, MSMS Committee on Governmental Medical Care Programs; and Hugh W. Brenneman, moderator for the telecast and executive director of MSMS and MAP.



Socio-Economic Committee Seeks Series of Papers

The MSMS Committee on Medical Socio-Economics is continuing its efforts to get expert opinion on the factors which will bear on the practice of medicine in the 1980's.

To implement this program the Committee has contracted for the preparation of position papers dealing with subjects such as medical education, paramedical personnel, government medical care facilities, socio-economic attitudes of citizens, and other professional groups. At present the Committee has received and reviewed the following papers:

1. "The Interrelationship of the Medical Profession and the Public" by Odin W. Anderson, Ph.D., of the University of Chicago.

2. "The Influence of Health Insurance on the Future Practice of Medicine" by Charles Hall, Ph.D., of Temple University.

3. "Future Physician Manpower Needs" by Grant Osborne, Ph.D., of the American Medical Association.

Other papers which have been contracted for will be reviewed by the committee by late fall or early winter. Among them are:

1. "The Influence of Closed Panel Direct Service Plans on the Future Practice of Medicine" by Caldwell B. Esselstyn, M.D., Executive Director, Community Health Association, Detroit.

2. "The Influence of Government Plus Other Factors on the Future Practice of Medicine" by Herbert S. Klarman, Ph.D., School of Hygiene and Public Health, Johns Hopkins University.

The Committee is planning to publish the papers so that this body of expert opinion on the environment in which medicine will be practiced in the 1980's will be available to County Societies.

JAMA Cites Michigan

Michigan efforts in continuing medical education were cited in the August 8 issue of JAMA—and all concerned can take a bow.

In part, JAMA said:

"There is ample precedent to support the concept that continuing medical education is most effective when planned cooperatively. Some of the most successful existing programs (e.g., those in the states of California, Kansas and *Michigan*) have for many years been organized through the cooperative efforts of medical societies, medical schools, hospitals, health departments, and voluntary hospitals. In this way the needs and interests of all elements in the producer-to-consumer line are considered and respected."

47 Intern in State

Forty-seven of the 72 Wayne State University Graduates in the Class of 1966 will intern in Michigan. Forty-two will serve at Detroit general hospitals, and five in Grand Rapids, Kalamazoo and Saginaw.

MSMS to Appoint Quackery Committee; AMA Helps Schools

MSMS and the AMA are stepping up their concern about quackery.

The MSMS Council has instructed the Public Relations Committee to establish a Subcommittee on Quackery Education.

The AMA Department of Health Education is moving to the front too with a new campaign to teach elementary school students the difference between a "physician" and a "doctor" and to help all students to develop critical thinking about health care.

In the new AMA informational kit, "Defense Against Quackery," concepts and sample lesson units are presented to teachers for use at three age levels: elementary school, junior high school, and high school and adult groups. Evaluation of health services, self-medication, drugs and cosmetics, and special health foods are some of the topics covered. A special feature is a list of "not recommended" books, some of which have been on the best-seller lists. "Defenses Against Quackery" is available to teachers and other educational groups from the Department of Health Education, American Medical Association, 535 N. Dearborn St. Chicago 60610.

Will You Vote in November?

The following quotation from the August 10 issue of "Your Washington Review" by Congressman Gerald Ford of Grand Rapids, will be of interest to MSMS members, their families and friends:

"The number of Michigan's citizens going to the polls is better than the national average but falls short of the record or of a desirable goal. I'm sure that all of us will agree that voting is both a privilege and a responsibility. Yet in 1964 only 65.5 per cent of the voting age population in Michigan voted for a U. S. Representative.

"We did better than the national average of 57.9 per cent but fell well behind the leading state, Utah, where 77.8 per cent of the voting age population cast ballots for Congressmen. At the other extreme was Arkansas with only 11.6 per cent.

"Today Michigan has 4,735,000 persons of voting age. Of these 215,000 have reached 21 since the 1964 election. We hope these young folks will help boost our percentage of voter participation this fall."

SQUIBB NOTES ON THERAPY

Breast-feeding and the "modern mother"

Despite a mild resurgence of interest in the importance of breast-feeding a few years ago, many women today do not choose to nurse their young. This is for a variety of reasons—social, economic, cultural and sometimes medical. In such cases the physician's task is to find the most suitable means of preventing lactation and easing the pain of breast engorgement.

The means of therapy

The value of hormone therapy for this indication is of course well established. Both androgen and estrogen are known to inhibit the production and secretion of the lactogenic hormone by the anterior pituitary. As estrogen levels decline sharply at parturition, lactogenesis is established. When androgen and estrogen are administered to the patient before the release of the lactogenic hormone lactation and breast engorgement are usually prevented.

The time of therapy

The time of administration of this combined medication is crucial; it must be given early enough to suppress the pituitary prolactin and last long enough to permit physiologic readjustment during the puerperium. Excellent results are most often seen when therapy is administered before the onset of the second stage of labor.

However, factors other than effectiveness must also be considered. The agent selected should not interfere in any way with parturition, subsequent uterine involution and the restoration of normal ovarian cyclic function. Furthermore, it should not cause rebound breast engorgement or other manifestations of hormonal imbalance.

A balanced formulation

Providing single-dose therapy for the prevention of lactation and breast engorgement, Deladumone OB is a potent androgen-estrogen combination with a prolonged action. The optimal balance of androgenic and estrogenic hormones achieved in this preparation minimizes the disadvantages inherent in single hormone therapy, such as rebound breast engorgement. Involution of the uterus and resumption of menstrual cycles are not affected.

As reported in a recent published study (Roser, D. M.: Obstet. & Gynec. *27*:73, 1966), Deladumone OB provided good suppression of breast engorgement in 95.3% and suppression of lactation in 81.1% of 86 obstetrical patients. These results are in general agreement with those of many earlier investigations; in several studies this injectable androgen-estrogen combination proved to be superior to oral medication.

Dosage:

As a single injection of 2 cc. before the onset of the second stage of labor.

Contraindications:

Established or suspected mammary cancer or genital malignancy.

Precautions and Side Effects:

Certain patients may be unusually responsive to either estrogenic or androgenic therapy. In such individuals virilization, uterine bleeding or mastodynia may occur.

Supply:

Deladumone OB, providing 180 mg. testosterone enanthate and 8 mg. estradiol valerate per cc., is available in 2 cc. Unimatic® disposable syringes and in 2 cc. vials. Both preparations are dissolved in sesame oil, with 2% benzyl alcohol as a preservative. *Before use, consult product literature for full prescribing information.*

Deladumone® OB

Squibb Testosterone Enanthate (180 mg./cc.) and Estradiol Valerate (8 mg./cc.)

Single-dose injection for lactation inhibition

SQUIBB *'The Priceless Ingredient' of every product is the honor and integrity of its maker.*

Are You Aware . . . .

That the Group Disability Insurance Plan sponsored by the Michigan State Medical Society can meet every test of quality that may be applied?

CHECK THESE IMPORTANT POINTS!

- **Renewal Guarantees.** The renewal of your protection is guaranteed even if the master policy should be terminated or if you should leave Michigan. This provision, of course, is contingent upon your remaining in active practice.
- **Long Term Protection.** Lifetime accident and illness to age 65. Shorter periods also available.
- **Favorable Definition of Total Disability.** Inability to perform the duties of your occupation for the first five years; thereafter, inability to engage in any occupation for which you are qualified by training or experience.
- **Low Cost.** Compare the cost of the MSMS Plan with any other of comparable quality. You will be pleasantly surprised. Premiums are low because of the applications of group rates and the combined purchasing of so many members of MSMS.

Examples of Annual Premiums:

Attained Age	Monthly Indemnity	Lifetime Accident 5 Years Sickness	Lifetime Accident Sickness to Age 65
Thru 33	$500	$126.90	$176.90
34-49	500	151.70	201.70
50-65	500	214.60	264.60

Write for premiums at other ages and other amounts of monthly indemnity.

PROVIDENT LIFE AND ACCIDENT INSURANCE COMPANY

BEN P. STRATTON AGENCY, INC.
Administrators
P.O. BOX 547
LANSING, MICHIGAN 48903

WE'LL MISS "BILL"

By B. M. Harris, M.D., Chairman
MSMS Publication Committee

On the eighteenth of July the Michigan medical profession suffered the loss of one of its most valuable members.

It had been my privilege to know "Bill" Hyland all of my professional life. He was at once and always a friend, counselor and mentor, to every doctor who had the opportunity to cross his path. The breadth of human understanding and compassion inherent in his philosophy was shared with all who were privileged to come within his ken.

He possessed the unique ability to control and shape the lives and conduct of his conferes without incurring dissention or rancor.

The strength and courage that he epitomized will be long remembered by all of us, and will enhance our resolution to each pursue our destiny with the equanimity and wonderful elan of a true gentleman.

The Michigan State Medical Society has lost its most dedicated and perceptive servant. The wisdom of his counsel in organized medicine will be sorely missed.

LEST WE FORGET RE TRAFFIC TOLL

No matter how safe the design of an automobile may become, the driver can still devise a way to produce a fatal accident. Even if Detroit comes up with a modified tank as the safest means of self-locomotion by mechanical means, when two of these hit head on at 60 miles per hour the results will be disasterous for the drivers and passengers.

No safety belt, no dash padding and no recessing of knobs will prevent a large share of fatal or near fatal automobile accidents each year. In 1965 the number of deaths on our highways was 65,000 and disabling injuries 1,800,000. These figures make the losses for any year in any of our wars seem small by comparison.

In a recent survey of Michigan highway accidents resulting in deaths, over 60 per cent could be blamed directly upon a driver from the evidence obtainable. In many instances the information available was not conclusive enough concerning the cause of an accident to put the blame directly upon the person or persons involved.

Drinking, sleeping and poor driving habits were the causes most frequently listed. The incidence of males under 25 years of age was disproportionately higher than for any other group.

There is no question that engineers can and should improve car designs to increase safety features. The manufacturers must assume their fair share toward a solution of the mayhem on the roads.

But, is too much emphasis and too much hope being put on the recent legislation to "build-in" automobile safety?

Is this a will-o-the-wisp fostered in part by a public that more and more expects its government to solve its problems and assume less and less responsibility?

After all the laws are passed, the safety belts fastened and the highways improved, it is still the driver who will be responsible for the great majority of accidents.

Can we ever legislate against the mother who allows her small child to stand beside her on the seat as she drives down a busy street?

Can we ever legislate against the aggressive teenager who uses his car as a means to release his pent up feelings?

Can we ever legislate good driving judgment?

Physicians can play an important role in this field. They must stress by patient or public contact that the responsibility for good driving rests with the individual. Medical advisory committees must seek methods to measure the medical (both physical and mental) adequacy of drivers. Physicians should support uniform vehicle codes recommended by reputable organizations such as the National Safety Council.

Finally, we can make recommendations to our patients relative to the effect that any medical problem may have on their driving performance.

ADVERTISEMENTS WORTH READING

It is virtually impossible to keep up with reports on all of the new drugs and other technical as well as non-technical products available to the physician. No doctor has the time to expose himself to all the available journals that contain this information. The type of advertisement that appears in Michigan Medicine helps to keep our readers abreast of the new products.

Many of us have become irritated by the banal material we see on television such as the anvil in the headache or the mechanical stomach with the faucet dripping acid. Perhaps this has resulted in a very generalized antagonism against any and all kinds of advertising. This is unfortunate. The type of advertising found in this journal we believe to be worthwhile or it would not be accepted.

The revenue that comes from our advertisers is not only appreciated but also makes possible the publication of MICHIGAN MEDICINE at a reasonable cost to each member of M.S.M.S. But of very great importance and value is the basic information that can be found in the pages they provide.

SCIENCE LANGUAGE

A recent survey of BioSciences Information Service of *Biological Abstracts* discloses that based on figures from the 1965 list of Serials for *Biological Abstracts* and *BioResearch Titles*, some 43 per cent of the journals currently abstracted choose English as the language of publication. If one adds to this figure the English language reports contained in multilingual journals, the total approaches 50 per cent.

In 1965, 6,735 titles from 91 countries were abstracted as compared with 6,000 in 1964.

The language of publication listed in order is as follows:

English	43.0 per cent
Russian	11.5 per cent
Spanish	8.2 per cent
German	7.4 per cent
French	5.9 per cent
Japanese	4.8 per cent
Portuguese	3.4 per cent
Italian	2.9 per cent
Poland	1.9 per cent
Netherlands	1.9 per cent
Sweden	1.4 per cent
Czechoslovakia	1.3 per cent

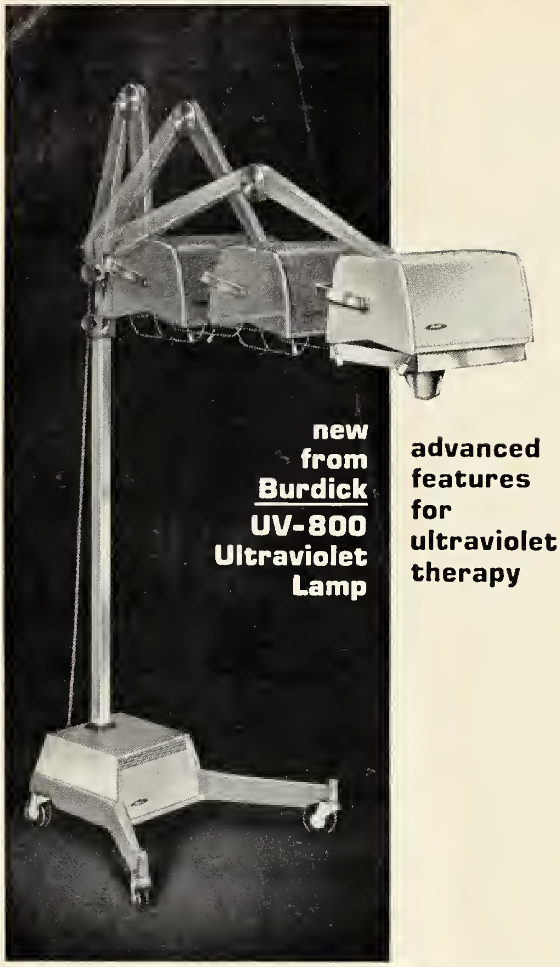
This country provides nearly one quarter of the world total and one half of the English language total.

Abstracts are a basic tool of research. If publication is an index of activity then we are indeed very busy experimenting, observing, and recording. According to the law of Conservation of Energy nothing is ever wasted.

So we all in our many languages tell it in Gath and publish it in the streets of Askelon.

FINE PROPOSAL

Congressman James Harvey, of Michigan's 8th Congressional District, is to be lauded for recently introducing legislation urging the President to award "an appropriately designed medal and certificate to



Burdick's unique **Equipoise Arm** gives you "full-reach" over the treatment table, and easy positioning for any treatment situation. Reflector unit floats into position with finger-tip ease — and holds. Reflector unit rotates 360° on its own axis, allowing the operator to select the correct angle and position for any treatment. New **"Localizer"** with 2-inch cone (supplied as standard equipment) permits uniform focusing of radiation to small treatment areas. The **Localizer** may be quickly attached to the reflector hood, and easily removed.

Telescoping vertical column permits storage of the UV-800 in a compact space. Shutters mounted inside the reflector effectively shield stray radiation when the lamp is not in use. Wide-stance base and large, easy-rolling casters give the UV-800 easy mobility and good stability during treatments. Efficient, high-intensity radiation — full mercury arc spectrum — short treatment time — long tube life. Now is the time to modernize your ultraviolet equipment. Consider all the features of the stylish new UV-800, then see your Burdick dealer or write The Burdick Corporation, Milton, Wisconsin 53563, about trading-up!

Medical Arts Supply Co.

311 State Street
Grand Rapids, Michigan

those citizens of the United States who, although not members of the armed forces or officers or employees of the Federal Government, voluntarily serve in areas where the armed forces are engaged in combat." This action was recently taken because of the volunteer work by two Saginaw physicians who served in South Vietnam.

Other doctors of medicine similarly have contributed experience and valuable knowledge in this humanitarian undertaking, and it is hoped that the Congress of the United States will recognize these dedicated individuals for their service.

TIME TO ASK

W. C. C. Cole, Jr., M.D.
MDPAC Board Chairman

Yes, it is time to ask yourself these questions as we head into important elections . . .

Who is my party going to run?
When and how will that selection be made?
How can I help him get elected?
How will he rate me after the 1966 election?

That last question is a good one to ponder. How does your representative in Lansing, or your Congressman in Washington, rate you?

Physicians must realize that the candidate and the elected official need monetary assistance but more than just that. When these lawmakers begin to rate you and me, they use such measuring sticks as: Has he worked in the party? Has he passed out literature or rang doorbells? Does his wife help at campaign headquarters, or help telephone voters on election day? Did he contribute to my campaign costs? Does he write and tell me his views?

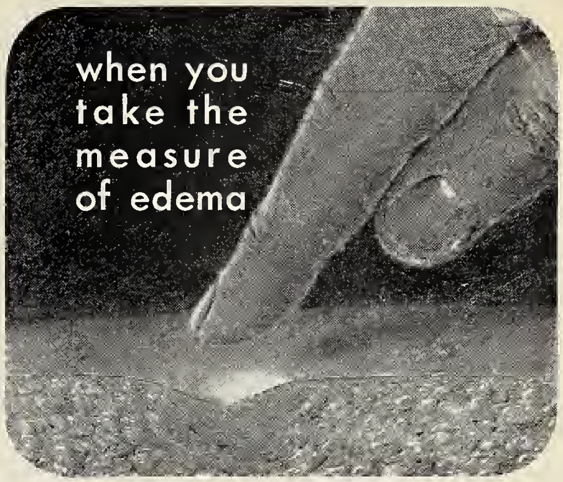
MSMS MDPAC challenge you to become a concerned voter and a dedicated worker in the party of your choice. The first thing to do, of course, is to overcome what seems to be a matter of apathy toward the whole subject of politics and public action.

As physicians and citizens, we have too much at stake to leave politics to others.

The time to begin is today.

On State Committee

Several MSMS members are serving as members of the State Educational Planning Committee for School Health Education, Physical Education and Recreation of the Michigan Department of Education. They include Wm. H. Kelly, M.D., Lansing; Chester A. E. Lund, M.D., Battle Creek, Eleanor Skufis, M.D., Adrian; Irving Posner, M.D., Detroit, and Jean M. Holdredge, M.D., Detroit.



. . . introduce your patient to

AQUATAG®
(BENZTHIAZIDE)

AQUATAG (Benzthiazide) is a potent, orally active, nonmercurial, diuretic agent. It is effective orally in producing diuresis in edema states, where it is therapeutically comparable to mercurials given parenterally. AQUATAG (Benzthiazide) is mildly antihypertensive in its own right and enhances the action of other antihypertensive drugs when used in combination.

DIURETIC ACTION: Clinically, the oral administration of AQUATAG (benzthiazide) results in diuretic activity within two hours with maximal natriuretic, chloruretic, and diuretic effects occurring during the fourth, fifth and sixth hours. Maintenance of response continues for approximately 12 to 18 hours. Acidosis is an unlikely complication since therapeutic doses of AQUATAG (benzthiazide) do not appreciably increase bicarbonate excretion. Edematous patients receiving 50 mg. of AQUATAG (benzthiazide) daily for five days developed a maximal increase in the rate of sodium excretion on the first day, and maintained this high rate until depletion of excessive body stores of sodium.

In congestive heart-failure patients, AQUATAG (benzthiazide) produced the same weight loss, during a 48-hour treatment period as did a maximally effective dose of hydrochlorothiazide.

DOSAGE: Diuresis, initially 50 to 200 mg.; maintenance 25 to 150 mg., daily. Hypertension 50 to 100 mg. initially, adjusted to 50 mg. t.i.d. or downward to minimal effective dosage level.

WARNINGS: Use with caution in the presence of renal disease as azotemia may be precipitated or increased. In patients with advanced hepatic disease, electrolyte imbalance may result in hepatic coma. Dosage of coadministered antihypertensive agents should be reduced by at least 50%. In cases of suspected electrolyte imbalance, serum electrolyte determinations should be performed and imbalance, if any, corrected. Stenosis or ulcer of small intestine have been reported with coated potassium formulas, and surgery has been required and deaths have occurred. Based on surveys of both United States and foreign physicians, incidence of these lesions is low and a causal relationship in man has not been definitely established. Until further experience has been obtained, the use of the drug in pregnant patients should be weighed against possible hazards to the fetus.

CONTRAINDICATIONS: AQUATAG (benzthiazide) is contraindicated in progressive renal disease or dysfunction including increasing oliguria and azotemia. Continued administration of this drug is contraindicated in patients who show no response to its diuretic or antihypertensive properties. Severe hepatic disease is a relative contraindication. (See "Warnings" above.)

PRECAUTIONS AND SIDE EFFECTS: Electrolyte imbalance with hypokalemia (digitalis toxicity may be precipitated), hypochloremic alkalosis and hyponatremia may occur.

Patients with cirrhosis should be observed for impending hepatic coma and hypokalemia. Other reactions may include blood dyscrasias, hyperuricemia and gout, nausea, jaundice, anorexia, vomiting, diarrhea, dizziness, paresthesia, photosensitivity and headache. Hepatic fetor, tremor, confusion and drowsiness are signs of impending pre coma and coma in patients with cirrhosis. Insulin requirements may be altered in diabetes. AQUATAG (benzthiazide) should be used with caution post-operatively as hypokalemia is not uncommon. Potassium supplementation may be advisable pre- and post-operatively. There have been occasional reports of thrombocytopenia, leukopenia, agranulocytosis, aplastic anemia and precipitation of acute pancreatitis or jaundice.

Before prescribing or administering, read the package insert or file card available on request.

Available as 25 or 50 mg. scored tablets.

Request clinical samples and literature on your letterhead.

S.J.TUTAG
& COMPANY
Detroit, Michigan 48234

Med. Assistants Meet Sept. 28-29

On September 28, the Michigan State Medical Assistants Society members will begin their two-day convention at Mr. President Motor Inn in Grand Rapids.

Speaking at the luncheon on "Citizen Responsibility in an Election Year," will be Mrs. Lenore Romney.

After the luncheon three awards will be given: Membership Trophy, Bulletin Award, and Medical Assistant of the Year.

The banquet at 7:30 will feature Homer H. Stryker, M.D., of Kalamazoo, as speaker.

On September 29, at 10:00 a.m., there will be a panel discussion on "Phases of Medicare." Speaking at the luncheon will be Mrs. Leota Westfall, of the Traffic Safety Center at Michigan State University. Awards and installation will follow.

U-M PG Programs

INTERMITTENT PROGRAMS:

Electrocardiography (Self Study, 38 weeks), September.

Clinical Internal Medicine (Thursdays), Sept. 8-Dec. 22.

Electrocardiography & Heart Disease (Tuesday evenings), Oct. 4-Jan. 17.

Clinical Internal Medicine (Wednesdays) Wayne County General Hospital, first session, Oct. 5-Dec. 21; second session, Jan. 4-March 29.

CONTINUOUS PROGRAMS:

Allergy & Clinical Immunology, Sept. 8-10.

Pathology with Clinical Application, Oct. 3-Dec. 16.

The Management of Common Emotional Problems in Family Practice, Nov. 3-4.

Clinical Neurology, Nov. 7-8.

Bio-mechanics in Clinical Practice, Nov. 17-18.

Otorhinolaryingology for Generalists, Dec. 1-3.

Sodium & Hypertension: Renin, Aldosterone and the Kidney, Dec. 3-4.

For further information, address: Department of Postgraduate Medicine, W5610, University Hospital, Ann Arbor, Michigan 48104.

U-M Reunion Sept. 15-16-17

Hundreds of University of Michigan Medical Center alumni will return to the campus for the fourth annual Medical Center Alumni Society Conference, September 15-16-17, and will see the premier of "Teaching, Research and Service," a color movie exploring life and learning at their alma mater.

The film was commissioned by the 10,000-member U-M Medical Center Alumni Society and produced by the university's Television Center. It reports not only on the activities of the Medical School but also on the specialty training programs of University Hospital and the educational opportunities in the School of Nursing.

After its premiere in Ann Arbor, the film will be shown to alumni groups elsewhere in Michigan and around the country.

The movie, of course, is not the only attraction at this year's reunion. Here are some of the others:

- A discussion by four deans and a professor of public health of personnel needs in the health sciences for the next 10 years.
- Special scientific programs for both doctors and nurses. Topics for doctors will include cardiovascular disease, special diagnostic procedures, mental retardation, and others. Nurses will hear of changing concepts in nursing education and practice.
- Social and scientific events for members of the "five-year classes" (1946, 1951, 1956, etc.) and members of specialty societies based at the university.
- Induction of doctors and nurses who graduated in 1916 into the university's Emeritus Club. U-M President Harlan Hatcher will preside at this 50-year recognition ceremony.
- A tea for nurses marking the 75th anniversary of nursing education at U-M.
- Special programs for doctor's wives and the husbands of nurses and lady medics.
- A dinner-dance, alumni luncheon, picnic, and the season-opening football game pitting U-M against Oregon State.

MIMA Installs Bruton; Holder, Next Leader

The Michigan Industrial Medical Association annual meeting in Hidden Valley Lodge, Gaylord, installed Martin F. Bruton, M.D., Detroit, as president.

Chosen president-elect was Benjamin B. Holder, M.D., Midland; vice-president, Frank A. Talbot, M.D., Detroit, and secretary-treasurer, F. L. Purcell, M.D., Flint.

The Mediatric Age:

There is a growing senescent body of people who —either from lack of motivation, or as a result of surgery, trauma, or extended illness—are on their way to malignant inactivity…

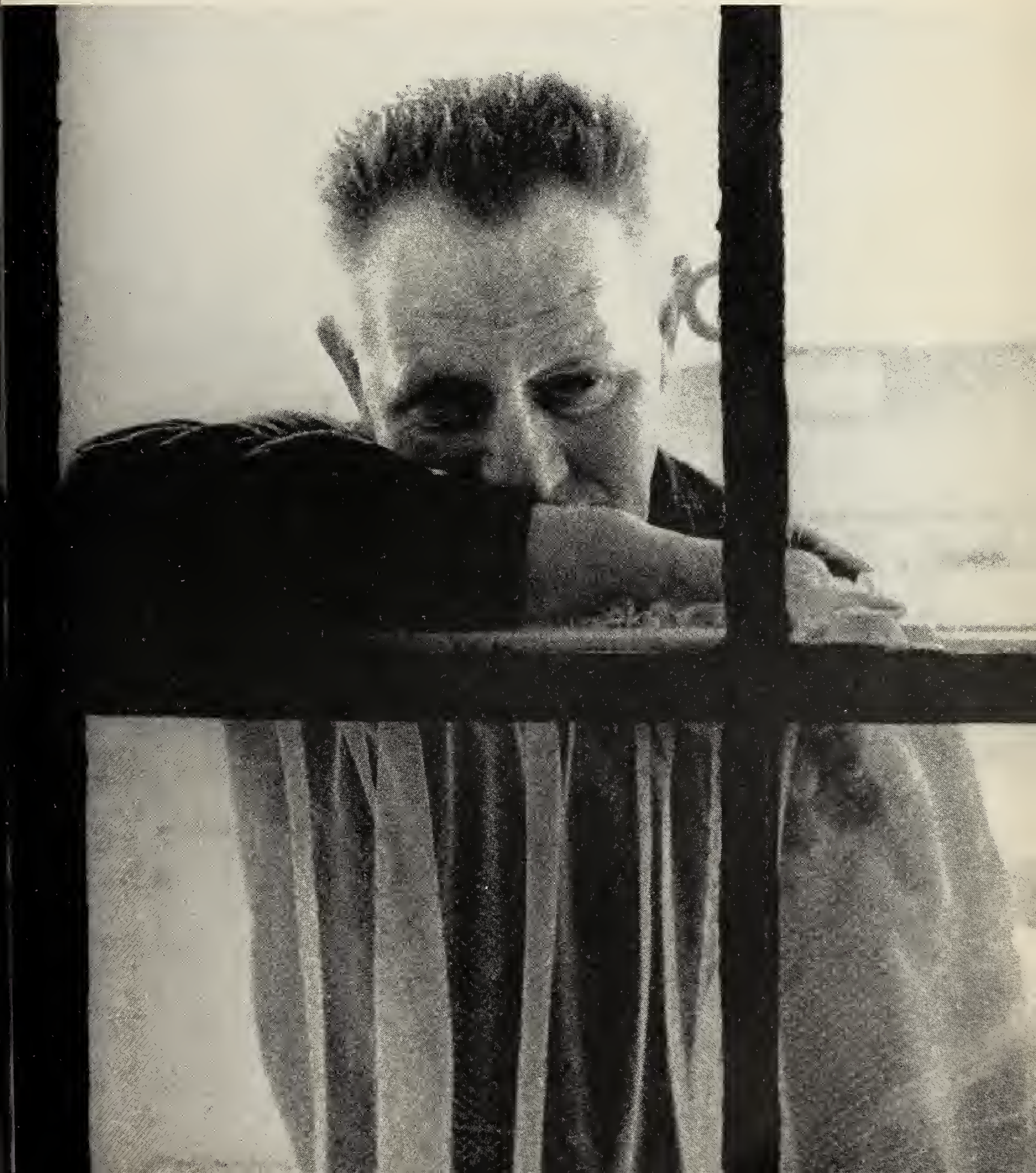
The Mediatric Age:

Some may be not quite sick, nor yet quite well. They may complain of too easy fatigue, of vague aches and pains.

Many need your assurance that they are not as old as they feel…

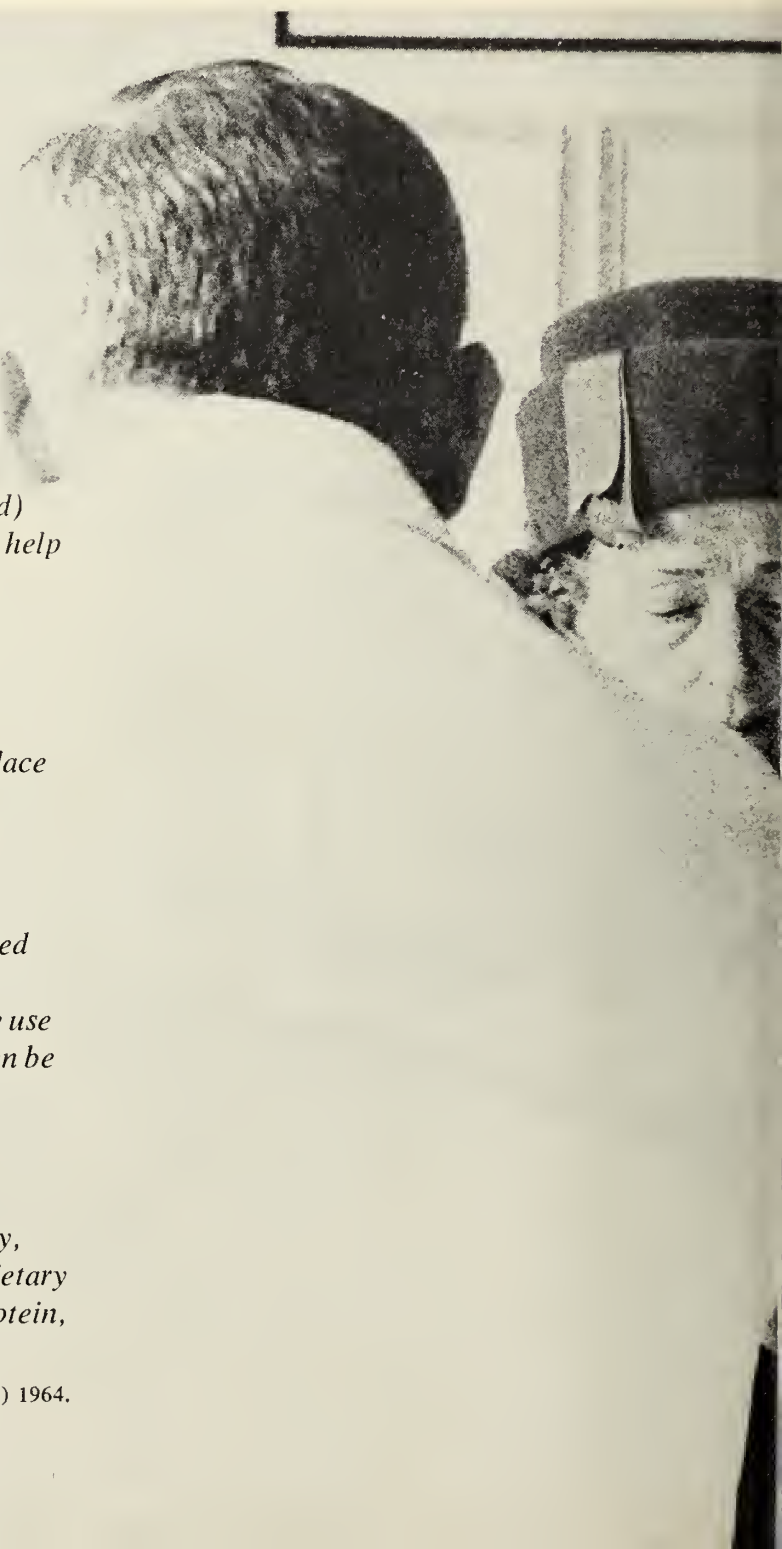
The Mediatric Age:

Frequently, they become "the waste-aways."
They have simply lost interest in
the maintenance of their own well-being—
often through the feeling
that they are no longer needed.



The Mediatric Age:

Unfortunately, there is no cure. But there are, largely through your own interest and direction, ways to help them back to a more active and useful life. There are medicines, too, designed to help. One such has proved useful in clinical practice:



"*A steroid-nutritional compound (Mediatric) was used in 100 patients to relieve some of the symptoms caused by degenerative changes of aging . . . This therapy resulted in improvement of 75 per cent of the patients . . .*"

McNeill, A. J.: Clin. Med. *8*:518 (Mar.) 1961.

"*Mediatric (steroid-nutritional compound) capsules, one a day, seem to give definite help to debilitated patients.*"

Arnold, E. T., Jr.: Geriatrics *12*:612 (Oct.) 1957.

"*Nutritional and hormone bolstering of function in the aged may have a useful place in geriatrics.*"

Morgan, A. F.: Gerontologist *2*:77 (June) 1962.

"*In diets which for any reason are restricted in calories, enough of these substances (B vitamins) may not be supplied . . . The use of B and C vitamin supplements may then be justified and indeed may be necessary.*"

Morgan, A. F.: Gerontologist *2*:77 (June) 1962.

"*Intensive nutritional therapy is necessary, especially in elderly people, to correct dietary deficiencies created by large losses of protein, vitamins and other nutrients.*"

Riccitelli, M. L.: J. Am. Geriatrics Soc. *12*:489 (May) 1964.

Mediatric®

Designed for the "metabolically spent"

Nutritional reinforcement for those who can't – or won't – eat properly... balanced amounts of estrogen and androgen to counteract declining gonadal hormone secretion and its sequelae of premature degenerative changes... mild antidepressant for a gentle "mood" uplift...

The estrogen component in MEDIATRIC is PREMARIN® (conjugated estrogens—equine), the natural estrogen most widely prescribed for its superior physiologic and metabolic benefits.

MEDIATRIC also provides *nutritional reinforcement—blood-building factors and vitamin supplementation.* It contributes a *gentle "mood" uplift* through methamphetamine HCl.

Three different dosage forms—Liquid, Tablets, and Capsules—offer convenience and variety.

MEDIATRIC Liquid

Each 15 cc. (3 teaspoonfuls) contains:

Conjugated estrogens—equine (Premarin®)	0.25 mg.
Methyltestosterone	2.5 mg.
Thiamine HCl	5.0 mg.
Cyanocobalamin	1.5 mcg.
Methamphetamine HCl	1.0 mg.

Contains 15% alcohol

MEDIATRIC Tablets and Capsules

Each MEDIATRIC Tablet or Capsule contains:

Conjugated estrogens—equine (Premarin®)	0.25 mg.
Methyltestosterone	2.5 mg.
Ascorbic acid	100.0 mg.
Cyanocobalamin	2.5 mcg.
Intrinsic factor concentrate	8.0 mg.
Thiamine mononitrate	10.0 mg.
Riboflavin	5.0 mg.
Niacinamide	50.0 mg.
Pyridoxine HCl	3.0 mg.
Calc. pantothenate	20.0 mg.
Ferrous sulfate exsic.	30.0 mg.
Methamphetamine HCl	1.0 mg.

Orally active, water-soluble conjugated estrogens derived from pregnant mares' urine and standardized in terms of the weight of active, water-soluble estrogen content.

MEDIATRIC helps keep the older patient alert and active; helps relieve general malaise, easy fatigability, vague pains in the bones and joints, loss of appetite, and lack of interest usually associated with declining gonadal hormone secretion.

CONTRAINDICATION: Carcinoma of the prostate, due to methyltestosterone component.

WARNING: Some patients with pernicious anemia may not respond to treatment with the Tablets or Capsules, nor is cessation of response predictable. Periodic examinations and laboratory studies of pernicious anemia patients are essential and recommended.

SIDE EFFECTS: In addition to withdrawal bleeding, breast tenderness or hirsutism may occur.

SUGGESTED DOSAGES: *Male and female:* 3 teaspoonfuls of Liquid, 1 Tablet, or 1 Capsule, daily or as required.

In the female: To avoid continuous stimulation of breast and uterus, cyclic therapy is recommended (3 week regimen with 1 week rest period—Withdrawal bleeding may occur during this 1 week rest period).

In the male: A careful check should be made on the status of the prostate gland when therapy is given for protracted intervals.

SUPPLIED: No. 910 – MEDIATRIC Liquid, in bottles of 16 fluidounces and 1 gallon. No. 752 – MEDIATRIC Tablets, in bottles of 100 and 1,000. No. 252 – MEDIATRIC Capsules, in bottles of 30, 100, and 1,000.

No. 910
MEDIATRIC
LIQUID
contains:
0.25
2.50
5.00
1.50
1.00
Contains 15% alcohol
SHAKE WELL BEFORE USING
CAUTION: Federal Law prohibits dispensing without prescription
MEDIATRIC
TABLETS

Mediatric®

steroid-nutritional compound

AYERST LABORATORIES, NEW YORK, N.Y. 10017 • Montreal, Canada

6634

Entries Sought For Art Show

Judges for the Annual Art Exhibit at the MSMS Annual Session will be Walter McBride, director of the Grand Rapids Art Museum and Mrs. Evelyn Zeek, a Grand Rapids photography expert and teacher.

A photography section of the show will be an innovation this year due to the interest of doctors and their wives in this art form.

The requirements for entering the exhibit, September 27-29 at Grand Rapids, are:

1. All work must be wholly original and done entirely by the submitting artist or photographer.

2. Artists and photographers may submit no more than *four entries* in the entire show.

3. Photographs must have the make of camera, distance and time exposures used. They must be 8 x 12 size or larger and must conform to other regulations set forth for paintings.

4. Artists or photographers must attach to the back of each entry a label giving the following information:

Name of artist
Address
Title of entry
Medium

5. Oil paintings must be suitably framed. Water colors, drawings and prints must be matted or framed. All framed entries must be equipped with eyelets and wire suitable for hanging.

The art categories are as follows:

I. Painting—oil, polymea, encaustic acrylic, lacquer, etc.
II. Painting—watercolor, casein, tempera, pastels, gouache.
III. Sculpture—wood, stone, ceramic, metal.
IV. Ceramics.
V. Drawing and graphic art—all print techniques.
VI. Three-dimensional design—weaving, stitchery, jewelry-making.
VII. Photography.

The following entry blank may be used for pre-registration to assist the Committee in planning the set-up of the show. If there is sufficient pre-registration, a program will be made available to viewers.

The entries will be received in the exhibit area in the Civic Auditorium on Monday, September 26, from 8:30 a.m. to 5:00 p.m. and Tuesday morning, September 27, until 11:00 a.m. The show will open at 1:00 p.m. on Tuesday, and must be left in place until 5:00 p.m. on Thusrday, September 29.

U-M Graduates 191; Two Profs Honored

Diplomas were awarded in June at the University of Michigan to 191 new doctors, the largest graduating class in the University's 116-year history.

C. John Tupper, M.D., who was associate dean of the U-M Medical School until last winter, when he became dean of the new University of California Medical School at Davis, gave the address.

Valedictorian of the class was Richard E. Miller of Detroit.

Two faculty members were honored. Earl R. Ferings, M.D., instructor in neurology, received the Senior Award, given to the junior faculty member whom the senior class judges the most outstanding clinical teacher.

Harold A. Oberman, M.D., associate professor of pathology, received the Elizabeth C. Crosby Award, and was chosen by the freshman and sophomore classes as the most outstanding teacher in the basic sciences.

Mail to: Mrs. F. A. Hutchinson
2518 Elmwood S.E., Grand Rapids, Michigan.

I will have entries in the Doctor-Wife Art Exhibit in the following categories:

.... Title or description ....
.... Title or description ....
.... Title or description ....
.... Title or description ....

Name of entrant: ....
Address: ....

following infection

B and C vitamins are therapy: STRESSCAPS B and C vitamins in therapeutic amounts...help the body mobilize defenses during convalescence...aid response to primary therapy. The patient with a severe infection, and many others undergoing physiologic stress, may benefit from STRESSCAPS capsules.

Stresscaps®

Stress Formula Vitamins Lederle

FOR PROFESSIONAL RECOMMENDATION ONLY

Each capsule contains:

Vitamin B_1 (as Thiamine Mononitrate)	10 mg
Vitamin B_2 (Riboflavin)	10 mg
Vitamin B_6 (Pyridoxine HCl)	2 mg
Vitamin B_{12} Crystalline	4 mcgm
Vitamin C (Ascorbic Acid)	300 mg
Niacinamide	100 mg
Calcium Pantothenate	20 mg

Recommended intake: Adults, 1 capsule daily, for the treatment of vitamin deficiencies. Supplied in decorative "reminder" jars of 30 and 100; bottles of 500.

LEDERLE LABORATORIES, A Division of American Cyanamid Company, Pearl River, New York

Lederle

626-6—3612

STRESSCAPS

Discusses Therapeutic Explosion

(The following are excerpts from an address about "Public Responsibilities of the Manufacturer of Prescription Medicine" by J. Mark Hiebert, M.D., at a University of Kansas Colloquim recently. Doctor Hiebert is chairman of the Board of Sterling Drug Co.)

"1966 will be the year when, for the first time, more than one billion prescriptions were filled in the pharmacies of America.

This huge number of prescriptions symbolizes the responsibility of the drug manufacturer in his task of producing efficacious medicines of high quality and safety. These prescription medicines cannot be bought over the counter and can reach the public only through intermediaries—the experts, members of the medical profession.

"One billion prescriptions is equivalent to five Rx's for every man, woman, and child in our country.

"The cost of the billion prescriptions will be a prime investment. They will substantially reduce the economic loss due to illness. They will reduce to a fraction the cost of hospital care and of illness by reason of the speedier recoveries they make possible.

"The therapeutic explosion of our time has provided still other benefits. For example, two-thirds of the patients being admitted to mental hospitals today are discharged in the first year, a marked improvement over the experience of only a few years ago."

"As to the evaluation of medicines for efficacy and safety, the computer is not the final and perfect answer, useful though it is. What the physician feels and perceives at the bedside of his patient may not fit into the square, or oblong or round hole of the punch card, but his observations are often a surer guide to the usefulness of a particular medicament for a particular patient.

"In the interest of the patient—that individual so unique that there is not another entirely like him in the whole wide world—we must be careful lest the scientific pendulum swing too far in the direction of mechanistic technology.

"We have come two-thirds of the way along the lane of the 20th century. In that period, life expectancy has increased by 75 per cent, from 40 years in 1900 to slightly more than 70 years today. What programs in medical schools, community hospitals, can we look to by way of further extension of life expectancy during the final third of the century? The answer lies in what all of us—you and I, the lawmakers and administrators, the scientists and the members of the healing professions, and the public—do with the knowledge we have, with the talents and energies that reside in us, to increase knowledge and to apply it courageously and intelligently, to the art, the science and the joy of living."

Technicians in the Parke, Davis & Company Research Laboratories inoculate embryonated eggs fo the study of a wide spectrum of different viruses.

Michigan Authors

Joseph R. Cipparone, M.D., Lansing, "Absence of One Umbilical Artery Analysis of 20 Cases in a 5-Year Study," American Journal of Clinical Pathology, March 1966.

J. E. Doolittle, M.D., and **C. R. Mority, M.D.**, Niles, "Prevention of Erythroblastosis by an Obstetric Technic," Obstetrics and Gynecology, April 1966.

Leo S. Figiel, M.D., **Steven J. Figiel, M.D.**, and **F. K. Wietersen, M.D.**, Detroit, "Roentgenologic Observations of Growth Rates of Colonic Polyps and Carcinoma," Acta Radiologica, September 1965.

S. J. Figiel, M.D., **L. S. Figiel, M.D.**, and **D. K. Rush, M.D.**, Detroit, "Changes in the Linear Thoracic Paraspinal Shadow Due to Para-Aortic Hemorrhage: A New Sign of Dissecting Aortic Aneurysm," Official Journal of the American College of Chest Physicians, April 1966.

Leo S. Figiel, M.D. and **Steven J. Figiel, M.D.**, Detroit, "Retrograde Barium Filling of the Terminal Ileum," Journal of Abdominal Surgery, January, 1966.

brings
peace to the
hyperactive
colon

CANTIL®
(mepenzolate bromide)

helps restore normal motility and tone

"In 40 of 44 cases of irritable or spastic colon, Cantil [mepenzolate bromide] or Cantil with Phenobarbital reduced or abolished abdominal pain, diarrhea and distention and promoted restoration of normal bowel function . . . Cantil [mepenzolate bromide] proved to be singularly free of anticholinergic side-effects . . . Urinary retention, noted in two cases was eliminated in one by reducing dosage."[1]

IN BRIEF: One or two tablets three times a day and one or two at bedtime usually provide prompt relief. Cantil with Phenobarbital may be prescribed if sedation is required.

Dryness of the mouth or blurring of vision may occur but it is usually mild and transitory. Urinary retention is rare. Caution should be observed in prostatic hypertrophy—withhold in glaucoma. Cantil with Phenobarbital is contraindicated in patients sensitive to phenobarbital.

Supplied: CANTIL (mepenzolate bromide)—25 mg. per scored tablet. Bottles of 100 and 250. CANTIL with PHENOBARBITAL —containing in each scored tablet 16 mg. phenobarbital (warning: may be habit forming) and 25 mg. mepenzolate bromide. Bottles of 100 and 250.

[1] Riese, J. A.: Amer. J. Gastroent. 28:541 (Nov.) 1957

LAKESIDE LABORATORIES, INC. Milwaukee, Wisconsin 53201

LAKESIDE

PRODUCTS
FOR PATIENTS
YOU SEE
EVERY DAY

14,000 Needed by 1970, Says New Nursing Report

By 1970, Michigan will need 7,000 more Registered Nurses and 7,000 Practical Nurses. So states a detailed report by the Michigan League for Nursing on present and future nursing needs in Michigan.

The report contains a plan, jointly approved by the Michigan Nurses Association and the Michigan League of Nursing, for recruitment and education of Michigan nursing personnel up to the year 1980.

"The problems facing nursing," declares Mrs. Marguerite Murray, R.N., executive director of the Michigan League for Nursing, "are rooted in the vast economic, social, and medical changes occurring today."

"Since 1953," Mrs. Murray added, "the ratio of nurses to population has increased, but the actual service time, due to retirement and part-time work, has decreased."

"Our study is first in three ways," she declared. "(1) We have studied the part-time factors which have changed nursing, (2) the report gives specifications on numbers and educational facilities, and (3) we have made plans for a definite re-survey in 1969."

"We have hopes that in the future," Mrs. Murray went on, "more young married women in their thirties will go into nursing and that more young men will choose nursing as their profession. In this way we will be tapping resources not fully used at present."

"The real problem we face is the expansion of our nursing schools and staffing the faculties of these schools," she added. "Everything hinges on the schools of nursing."

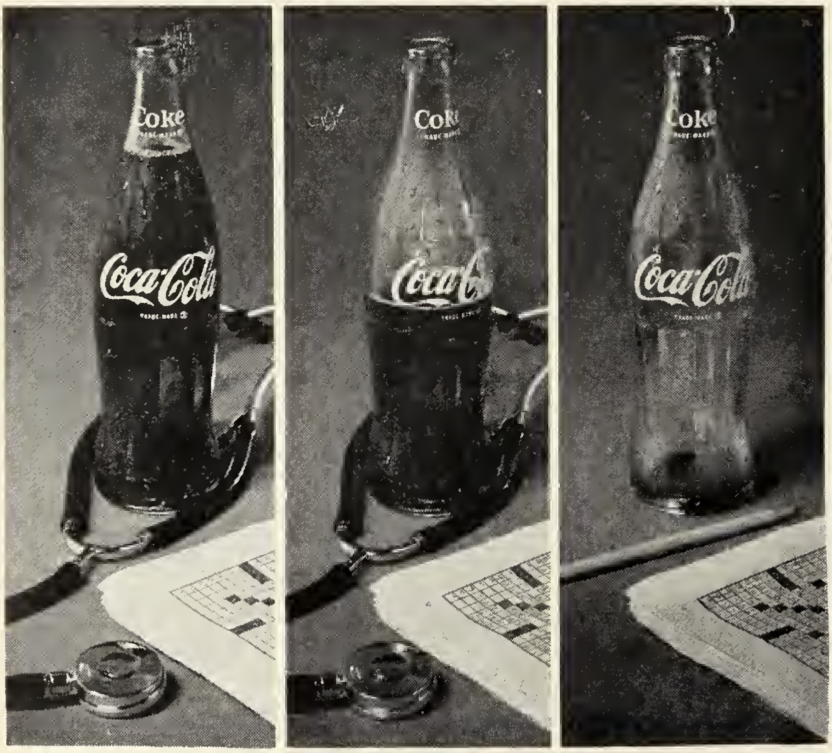
The complete report on Michigan nursing personnel and educational needs up to 1980 is available through the Michigan League for Nursing, 51 West Warren Avenue, Detroit, Michigan 48201. The cost is $3.00.

Gould Installed; MSPN Names Three Officers

Stuart M. Gould, Jr., M.D., Grand Rapids, has started his duties as President of the Michigan Society of Psychiatry and Neurology, which is the Michigan branch of the American Psychiatric Association.

Herbert A. Raskin, M.D., Detroit, has been chosen President-Elect.

Other officers include Dave B. Ruskin, M.D., Saginaw, Secretary, and Thomas A. Petty, M.D., Grosse Pointe, Treasurer.



11:47 pm 11:53 pm 12:06 am

The meaningful pause. The energy it gives. The bright little lift. Coca-Cola with its never too sweet taste, refreshes best. Helps people meet the stress of the busy hours. This is why we say things go better with Coke
TRADE-MARK®

Good Samaritan Fears Discussed

An imaginary "legal spook" continues to plague nedical personnel and threatens the public welfare.

Marcus L. Plant, professor of law at the University of Michigan, warns that misunderstanding still seems to make some qualified professional persons reluctant to help the injured in emergency cases.

Despite the Good Samaritan statutes in Michigan and 31 other states, fear of legal action still persists, ne said.

Good Samaritan Laws provide, Professor Plant ex-olained, that any physician (or any person) who enders aid gratuitously at an emergency scene shall not be held liable for ordinary negligence—he can only be held liable for gross negligence or willful nisconduct.

"Many physicians envision their services at an emergency as a possible source of lawsuit and are eluctant to render emergency care," he said. He idded that three social conditions nurture this un-easonable fear: (1) the increase of malpractice iability claims in recent years; (2) the dramatiza-ion of a lawsuit climate by the mass media; (3) careless and unfounded rumors spread through hospitals and medical schools.

A survey by the Law Medicine Research Institute of Boston University concluded that only 27 per cent of answering physicians indicated that they would respond favorably and unqualifiedly to the call "Is there a doctor in the house?"

When you change the scene to a muddy ditch along a desolate road, the law professor said, an even greater number would probably give fear of lawsuit as a reason for not rendering emergency assistance.

Yet there seems to be no case on record when a physician actually has been sued for medical malpractice after answering an emergency.

Studying this "legal spook" the AMA law department recently pointed out that of 14,000 physicians they polled, 3,000 claims were reported but only six or eight resulted from a Good Samaritan situation. In none of these cases was a suit filed against a physician.

This unreasonable fear among physicians, Plant concluded, has the tragic result that "those involved in accidents and other emergencies are faced with the anamolous situation that some people trained to save lives are discouraged from doing so, and that the most likely person to stop and to render aid is the uninformed layman, who is generally the least qualified to perform any sort of medical help."

BRIGHTON HOSPITAL

A non-profit foundation

FOR ALCOHOLISM

Member, Michigan Hospital Association

A facility designed to rehabilitate and aid the compulsive drinker in arresting his addiction.

Brighton Hospital meets the standards established by the Michigan State Board of Alcoholism and is recommended by that Board.

12851 East Grand River
One block south of I-96 at Kensington Rd. Exit
Four miles east of U. S. 23
Brighton, Michigan
ACademy 7-1211

Sustained circulatory, respirato and cerebral stimulation for t

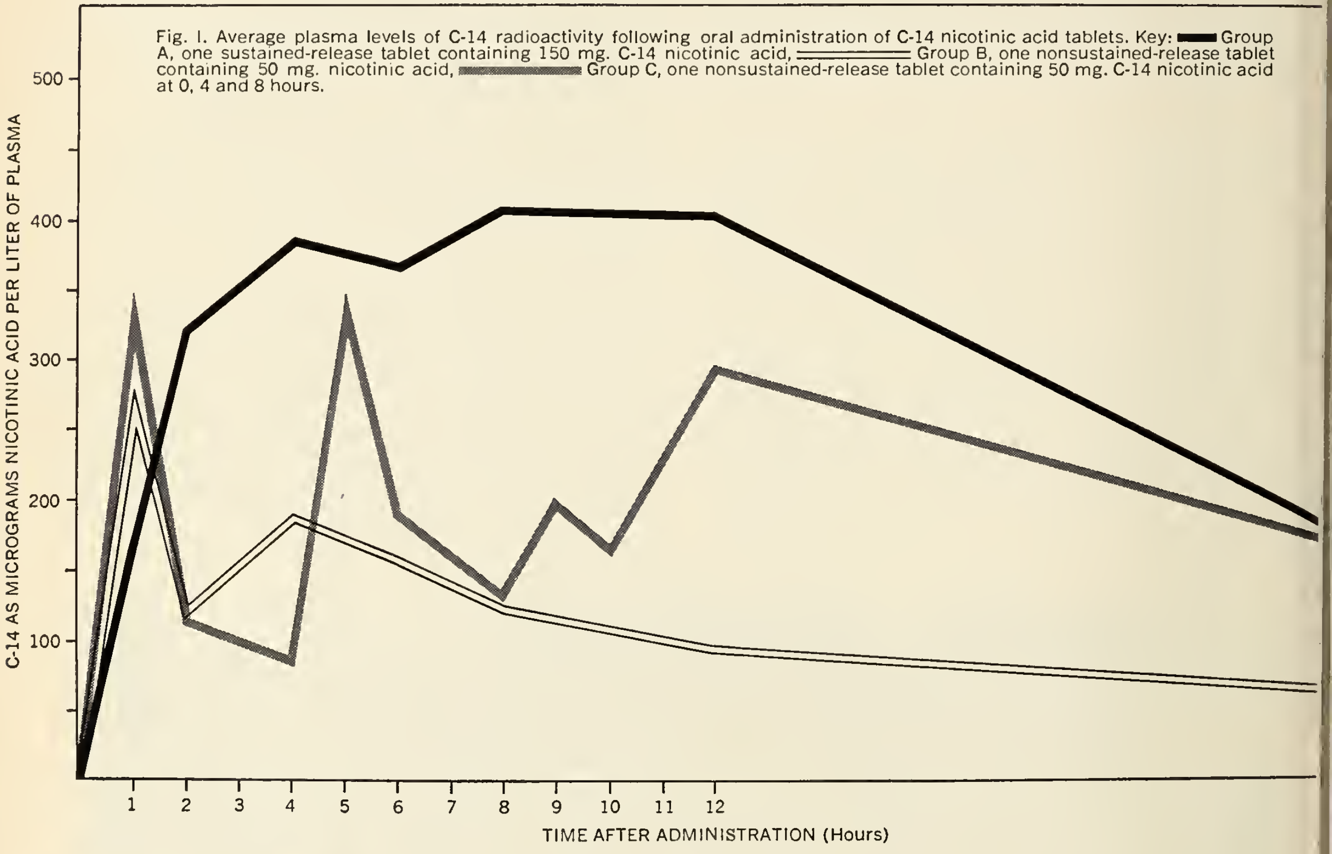


Fig. I. Average plasma levels of C-14 radioactivity following oral administration of C-14 nicotinic acid tablets. Key: ▬ Group A, one sustained-release tablet containing 150 mg. C-14 nicotinic acid, ═ Group B, one nonsustained-release tablet containing 50 mg. nicotinic acid, ▬ Group C, one nonsustained-release tablet containing 50 mg. C-14 nicotinic acid at 0, 4 and 8 hours.

(fewer absent doses by absent-minded patients

Human volunteer subjects were administered Geroniazol TT tablets with the nicotinic acid component made radioactive with C-14. Plasma and urine samples were analyzed. (See Figures I and II) The radioactive tracer study substantiated the previous clinical evidence that the release of nicotinic acid from the Geroniazol TT tablet produced a gradual rise in plasma levels to a plateau for a total of 12 hours and more.

Such proven sustained activity makes the management of geriatric patients much easier by minimizing the possibility of neglected doses through absentmindedness or senile confusion. Therapy *can* be c tinuous on a daily dose of only one Geroniazol TT t let every 12 hours.

The gradual release of nicotinic acid in Geronia TT will provide the well-known peripheral vasodila tion needed in patients with deficient circulation with a minimum amount (if any) of "flushing." A cerebrovascular circulation is complemented by p tylenetetrazol, long-established as a cerebral and piratory stimulant.

Geroniazol TT improves the typical, unfortun signs of senile confusion. Patients become more al

ed and debilitated

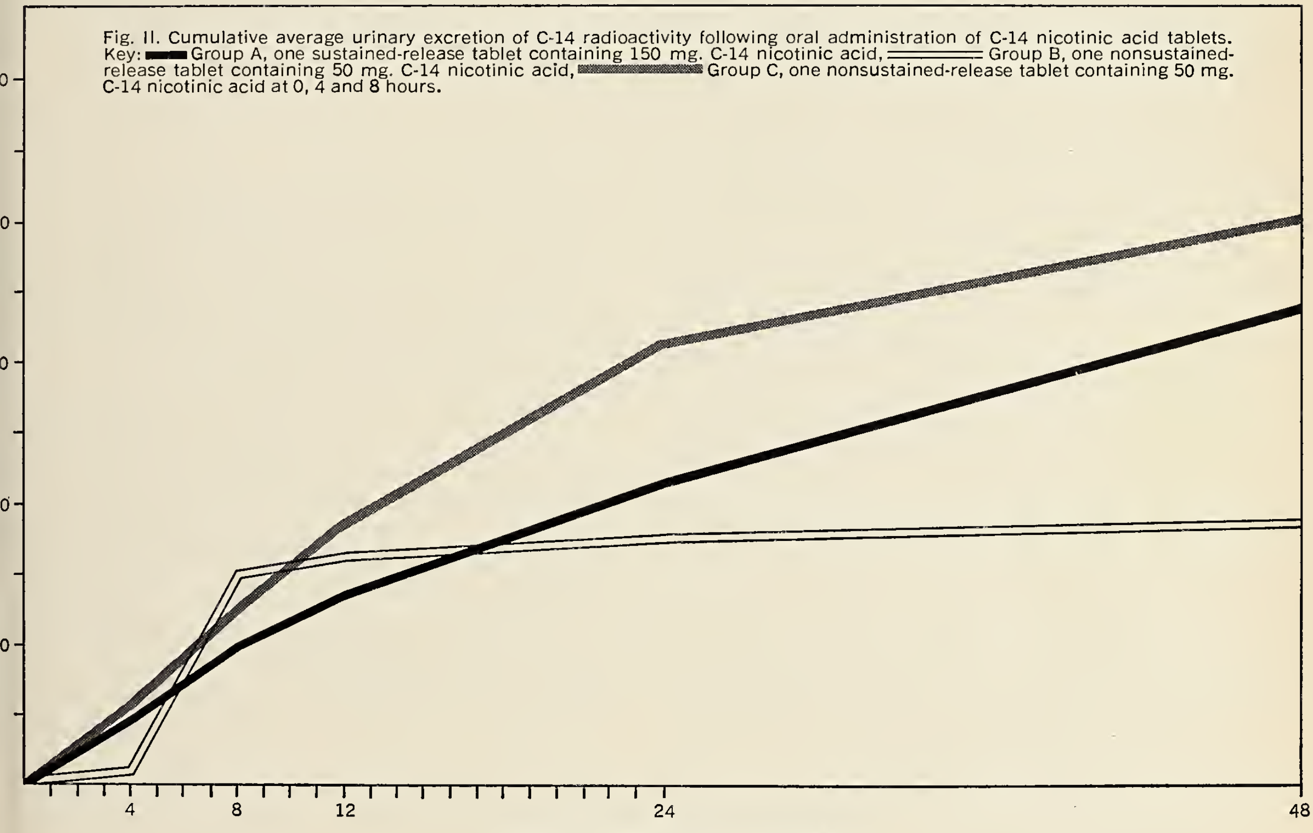


Fig. II. Cumulative average urinary excretion of C-14 radioactivity following oral administration of C-14 nicotinic acid tablets. Key: ▬ Group A, one sustained-release tablet containing 150 mg. C-14 nicotinic acid, ═ Group B, one nonsustained-release tablet containing 50 mg. C-14 nicotinic acid, ▨ Group C, one nonsustained-release tablet containing 50 mg. C-14 nicotinic acid at 0, 4 and 8 hours.

confused and moody. Personal care, memory, tional stability, social attention improve. Fatigue, thy and irritability are reduced.

prescription for 100 tablets of Geroniazol TT will nit your patients to enjoy the benefits of time-onged nicotinic acid/pentylenetetrazol therapy, n economical price. Dosage is only one tablet every ours.

traindications: There are no known contraindica-s.

autions: Exercise caution when treating patients a low convulsive threshold.

Side Effects: Side effects are rarely encountered, however due to the vasodilatation effect of nicotinic acid, transitory mild nausea, flushing, tingling and pruritus are possible.

Dosage: One tablet every 12 hours.

Supplied: Prescribe bottles of 100 tablets, to take advantage of recent price reduction.

References: 1. Report by Nuclear Science & Engineering Corp., Pittsburgh, Pa., in files of Philips Roxane Laboratories. 2. Connolly, R.: W. Virginia Med. J. *56*:263 (Aug.) 1960. 3. Curran, T. R., and Phelps, D. K.: Am. Pract. & Digest Treat. *11*:617 (July) 1960.

"First with the Retro-Steroids"
PHILIPS ROXANE LABORATORIES
Division of Philips Roxane, Inc., Columbus, Ohio
A Subsidiary of Philips Electronics and
Pharmaceutical Industries Corp.

Geroniazol® TT

nicotinic acid 150 mg., pentylenetetrazol 300 mg.
Tempotrol® Time Controlled Tablet

Drug Research Costs Mounting

The U. S. pharmaceutical industry spends nearly three times as much of its sales income on research as do other industries . . . four times more of its total research budget on fundamental research.

Research costs continue to mount. It is anticipated that by 1970 the industry will be spending close to $500 million annually for research.

Behind every new drug that has reached the public in the past decade, it is estimated that the industry has spent some $5 million in research and development costs.

It costs the pharmaceutical industry an average of $36,000, with some companies spending as much as $75,000 a year in laboratory equipment, salary and overhead, to keep just one research scientist on the job and provide him with proper technical assistance and equipment. A National Institutes of Health analysis of pharmaceutical industry research and development provides a more sharply focused comparison, showing expenditures of $87,700 per doctoral-level research scientist.

KINGSWOOD HOSPITAL, Michigan's finest
and newest facility for intensive, short-term
treatment of voluntary
neuropsychiatric patients.

Philip N. Brown, M.D.
Medical Director

Marvin J. Lawrence, F.A.C.H.A.
Administrator

KINGSWOOD HOSPITAL
10300 W. EIGHT MILE ROAD
FERNDALE 20, MICHIGAN Telephone: Area 313 398-3200

PRENTICE-HALL OFFERS MEDICARE HANDBOOK

A doctor's emergency handbook on medicare, entitled, "How to Practice Successfully Under Medicare," has been published by Prentice-Hall and is available for interested physicians.

The 40-page booklet may be obtained for $1.50 from MSMS, 120 W. Saginaw, East Lansing.

NEW STATE HEALTH SERVICE

The Michigan Department of Public Health has established, within the Section of Environmental Health, a new work unit, to be called "The Consultation, Evaluation and Training Unit." The broad responsibilities of the unit are:

1. To provide consultation service to local health departments and other agencies on the various environmental health programs and activities of the section.

2. To develop and implement procedures for evaluating environmental health programs being conducted by local health departments.

3. To develop and implement training programs and prepare educational materials for environmental health personnel employed by local health departments.

WSU GETS NURSING GRANT

A $352,000 federal grant has been received by the WSU College of Nursing to improve nurse training during the next five years.

Granted under the Nurse Training Act of 1964 Projects Grants for the Improvement of Nurse Training, the funds will be used to produce and telecast high quality lectures and demonstrations to school of nursing in metropolitan Detroit via a 2,500-megacycle educational transmission system.

CAREERS PROMOTED

The fifth annual Health Career Days at Battl Creek this spring was successful with Richard J Campbell, M.D., as chairman. The exhibits included one by the Michigan Health Council. Sila Braley, director of Dow Medical Research, spoke t the students at the afternoon program and to th Calhoun County Medical Society in the evening.

Say you saw it in Michigan Medicine

MOLECULAR REMODELING—

laboratory exercise or clinical necessity?

More than twenty-five years have passed since the discovery of the diuretic activity of sulfanilamide started pharmacologists on a succession of molecular remodelings to find the ideal diuretic.

Diuresis—a sought-after clinical effect from an unwanted side effect

It started in 1937 when a clinician reported that the administration of a sulfonamide was sometimes accompanied by an unexplainable side effect—metabolic acidosis.[1] Three years later the side effect was explained. The sulfonamide radical of sulfanilamide inhibited carbonic anhydrase,[2] the enzyme responsible for converting carbon dioxide and water to hydrogen ions and bicarbonate ions.

Later, other investigators showed by dog experiments that metabolic acidosis probably resulted when the inhibition of carbonic anhydrase upset the exchange of hydrogen and sodium ions, causing increased excretion of sodium as the bicarbonate.[3]

It was twelve long years after the first report of the unexplainable side effect (metabolic acidosis) that it was finally shown that large doses of sulfanilamide administered to edematous patients were indeed capable of promoting diuresis.[4] However, the possibility of toxic effects from its prolonged use and its relatively weak diuretic action made it impractical for clinical use as a diuretic.[5]

Because the inhibition of carbonic anhydrase seemed to be the key to effective diuresis, investigators began to look for more potent enzyme inhibitors—in the hopes that they would be more effective diuretics.

The most important of these early compounds, acetazolamide, enjoyed several years of fairly wide clinical use.

Its carbonic anhydrase inhibitory activity was several hundred times greater than that of sulfanilamide.[6] The increase in inhibitory activity, however, increased not only the excretion of sodium and bicarbonate ions, but also the excretion of potassium.[7] And, like its predecessor, acetazolamide precipitated mild acidosis. Its prolonged use could result in hypokalemic acidosis.[7]

The 'thiazides'—an answer to the metabolic acidosis caused by carbonic anhydrase inhibition

Despite the fact that the sulfonamide group appeared to be responsible for carbonic anhydrase inhibition which in turn appeared to be responsible for diuresis, investigators began to synthesize compounds with structural alterations to the sulfonamide group.

The first major breakthrough came with the synthesis of chlorothiazide. Altering the sulfonamide group did indeed alter the ability of chlorothiazide to inhibit carbonic anhydrase—it was only 1/10th as potent as acetazolamide in inhibiting the enzyme.[8] Despite the drop in inhibitory potency, however, chlorothiazide proved to be an effective diuretic—an observation that led to the conclusion that its diuretic action was due to some mechanism other than its action on carbonic anhydrase.[9, 10]

For effective diuresis, chlorothiazide was administered in daily dosages ranging from 250 to 2000 mg.[11] It increased the excretion of sodium and chloride; and, to a lesser extent, potassium and bicarbonate.[11] The excretion of potassium appeared to be maximal at higher dose levels at which, theoretically, the carbonic anhydrase inhibitory effect is more active.[11] Its prolonged use, therefore, could sometimes result in metabolic hypokalemic, hypochloremic alkalosis.[7]

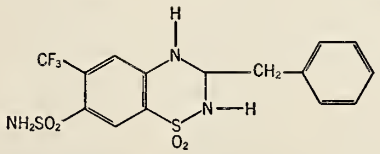
Naturetin—effective diuresis with more favorable electrolyte balance

Other thiazides followed—with improvements being aimed at two particular areas: 1. attempts to increase diuretic action in relation to the milligram potency of the drug, and 2. attempts at a more favorable sodium/potassium ratio in the urine, i.e., to decrease the excretion of potassium while maintaining the excretion of sodium.[12]

One of these, Naturetin, Squibb Bendroflumethiazide, has made advances on both these points. "By adding a 3-benzyl radical to hydroflumethiazide a rather dramatic reduction in dose range is accomplished. With this drug, effective sodium excretion is obtained with doses between 2.5 and 10 mg., which is a 200 to 1 ratio as compared to chlorothiazide..."[13]

Moreover, due probably to its virtual lack of carbonic anhydrase inhibition, Naturetin (bendroflumethiazide) has been shown to cause less potassium and bicarbonate loss and less alteration in urinary pH than either chlorothiazide or hydrochlorothiazide.

Naturetin is outstandingly effective not only in establishing, but also in maintaining, excretion of retained fluid in edematous patients. And its duration of action is sufficiently prolonged to allow a single daily administration in most patients. Naturetin is also an effective antihypertensive agent.



Contraindications: Severe renal impairment; previous hypersensitivity.

Warning: Ulcerative small bowel lesions have occurred with potassium-containing thiazide preparations or with enteric-coated potassium salts supplementally. Stop medication if abdominal pain, distension, nausea, vomiting, or G.I. bleeding occur.

Precautions: The dosage of ganglionic blocking agents, veratrum, or hydralazine when used concomitantly must be reduced by at least 50% to avoid orthostatic hypotension. Electrolyte disturbances are possible in cirrhotic or digitalized patients.

Side Effects: Bendroflumethiazide may cause increases in serum uric acid, unmask diabetes, increase glycemia and glycosuria in diabetic patients and may cause hypochloremic alkalosis, hypokalemia; cramps, pruritus, paresthesias, and rashes may occur.

Supplied: Naturetin (Squibb Bendroflumethiazide) 5 mg. and 2.5 mg. tablets. Also available Naturetin c̄ K [Squibb Bendroflumethiazide (5 or 2.5 mg.) with Potassium Chloride (500 mg.)]. For full information, see Product Brief.

References: **1.** Southworth, H.: Proc. Soc. Exper. Biol. & Med. *36*:58, 1937. **2.** Mann, T. and Keilin, D.: Nature *146*:164, 1940. **3.** Pitts, R. F., and Alexander, R. S.: Am. J. Physiol. *144*:239, 1945. **4.** Schwartz, W. B.: New England J. Med. *240*:173, 1949. **5.** Friedberg, C. K., in Moyer, J. H., and Fuchs, M.: Edema Mechanisms and Management, Philadelphia, W. B. Saunders Co., 1960, p. 259. **6.** Cumming, J. R.; Tabachnick, E., and Seelig, M., in Moyer, J. H., and Fuchs, M.: op. cit., p. 254. **7.** Werko, L., in Moyer, J. H., and Fuchs, M.: op. cit., p. 188. **8.** Beyer, K. H., Jr., in Moyer, J. H., and Fuchs, M.: op. cit., p. 274. **9.** Maren, T. H., and Wiley, C. E.: J. Pharmacol. & Exper. Therap. *143*:230, 1964. **10.** Earley, L. E., and Orloff, J.: Ann. Rev. Med. *15*:149, 1964. **11.** Fuchs, M., and Mallin, S. R., in Moyer, J. H., and Fuchs, M.: op. cit., p. 276. **12.** Ford, R. V., in Moyer, J. H., and Fuchs, M.: op. cit., p. 290. **13.** cited in Fuchs, M., and Mallin, S. R. (ref. 11): op. cit., p. 283.

Naturetin®
SQUIBB BENDROFLUMETHIAZIDE
to reduce excess fluid
or high blood pressure

SQUIBB 'The Priceless Ingredient' of every product is the honor and integrity of its maker.

UROLOGISTS ELECT

Edward J. Shumaker, M.D., Detroit, was recently chosen as president-elect of the Detroit Branch of the American Urological Association.

J. Stanley Spooner, M.D., Windsor, is president this year. The secretary-treasurer, who serves a three-year term, continues to be James M. Pierce, Jr., M.D., Detroit.

Gary (left) and Terry Dardas are identical twins on identical missions. For the past four years, the 26-year-old Ph.D. candidates have been part of the Michigan State University tuberculosis research team headed by Professors Walter and Virginia Mallmann. The Bay City twins earned associate science degrees at Bay City Junior College in 1960 and received bachelor's degrees in biology and chemistry at Central Michigan in 1962. They have completed master's degree requirements at MSU and expect to have their doctoral degrees completed in 1967 with majors in microbiology and minors in biochemistry and physiology. The MSU tuberculosis research project is sponsored by the U. S. Department of Agriculture, the National Tuberculosis Association and the Michigan Tuberculosis and Respiratory Disease Association. Together they recently presented a joint research paper before the medical branch of the American Thoracic Society—National Tuberculosis Association, meeting in San Francisco.

Upgrade Health Workers

A "Manpower for Health" program has been launched at Francis A. Bell Memorial Hospital in Ishpeming. Manpower for Health is a national co-operative project of the Hospital Research and Educational Trust of the American Hospital Association and the U. S. Department of Labor. The primary objectives of the program are to provide job opportunities for unemployed or unskilled workers and at the same time help health care facilities provide on-the-job training for the workers so vital to the expanding health field.

The two other prime targets are: upgrading skills of currently employed health personnel, and developing greater uniformity of job skills through the health field.

Drug Firms Employ 19,000 in Research

The nation's prescription-pharmaceutical manufacturers now the largest industrial employer of health-related research workers in the United States anticipate adding another 2,500 scientists and supporting personnel by the end of 1968.

By that year, 19,000 scientists and technician will be engaged in research and development in the industry. An analytical report, "Trends in R & D Manpower in the Pharmaceutical Industry 1959-65 and 1968," has been released jointly by th National Institutes of Health, Public Health Service DHEW, and the Pharmaceutical Manufacturer Association.

Single copies of the report may be obtained from the Pharmaceutical Manufacturers Association, 115 Fifteenth Street, NW., Washington, DC 20005.

MENTAL RETARDATION INSTITUTE STARTED

An institute for the study of mental retardation ha been authorized by University of Michigan Regent A new building to house the institute, providing patient-oriented base for training and research, wi be built near the U-M Medical Center. William M Cruickshank, Ph.D., a psychologist, was named direc tor, effective February 1.

The primary purpose of the facility will be "to pro vide a clinical setting for interdisciplinary training i mental retardation for physicians, educators, psycholo gists, social workers, nurses, speech and hearing pe sonnel, public health workers, and other profession personnel."

Urges Sex Education

Mary S. Calderone, M.D., executive director of e Sex Information and Education Council of the . S.:

"We're spreading out a banquet table of informa- n on everything from space to archaeology, but leliberately and criminally withholding" sex edu- tion. Sex education should amount to far more an instruction about reproduction processes. It ould help students develop a mature acceptance their sexuality as part of their total personalities d the capability of using their sexuality as respon- ly and creatively as their other endowments during eir entire life span."

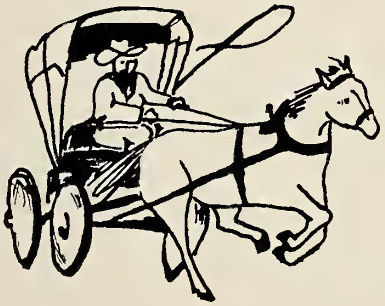
ffer Folder about Narcotics

A pamphlet entitled "Prescribing and Dispensing arcotic Drugs," prepared by the APhA with sup- ements added by MSPA, is now available from e Michigan State Pharmaceutical Association.

The brochure provides information on the Fed- al Narcotic Act, including a list of the Class A d B drugs by trade name as well as Michigan viations from the Federal act.

It is designed to inform physicians on the legal quirements in prescribing and handling narcotics.

Physicians may obtain copies from their local armacist or by ordering directly from the MSPA fice, 1812 Michigan National Tower, Lansing.



For Your Library

Copies of "A Century of Service in Medicine," ublished as a Centennial highlight by MSMS, re still available for cost, $2.00. The book, ound handsomely in blue, was written by Wm. . Stapleton, Jr., M.D., of Detroit, the MSMS istorian. To obtain a copy, write to MSMS, 20 West Saginaw, East Lansing, and enclose a heck.

NOTED AND QUOTED:

Far better it is to dare mighty things, to win glorious triumphs, even though checkered with failure, than to take rank with those poor spirits who neither enjoy much nor suffer much, because they live in the grey twilight that knows not victory nor defeat.

Theodore Roosevelt

"Modern man often confuses democracy with mediocrity. He strives for equality of rewards instead of equality of opportunity.

"Suppose the starter at a race became confused and concentrated on seeing that all the contestants crossed the finish line together; instead of seeing that they all had an equal opportunity at the start. There would be no winner, no uncommon man; the race would be geared to the average man, the common man. Mediocrity would be the winner.

"The nation that fails to produce uncommon men will have no leaders."

—J. Lewis Powell
Management Consultant

"When the best medical leadership dominates a health agency, that program is inevitably of a high order. When medical leadership is weak or absent, the agency's program is apt to be inefficient, profligate and sentimental. Medicine has the responsibility for providing judgment and advice which leads to proper action and participation by the public in the programs of voluntary health agencies."

—John S. Hirschboeck, M.D., Vice President
Marquette University School of Medicine

"We found that 32 per cent of the arthritic victims do not see their doctors. We found that another 30 per cent see their doctor infrequently and are dissatisfied with the course of treatment. We also found that the arthritic population in Wisconsin is spending $6 million annually on fraudulent drugs, devices and treatments. Thus it is mandatory, in our thinking, that the public be educated to the facts of arthritis."

—Donald L. McNeal, Executive Director
Wisconsin Arthritis Foundation, Milwaukee

Offer Research Results

New research results reported to the National Institute of Mental Health are summarized in a publication issued by the Public Health Service of the U. S. Department of Health, Education, and Welfare.

Single copies of "Mental Health Research Findings, 1963," Public Health Service Publication No. 1136, can be obtained without charge from the Public Health Service, Washington, D. C. 20201.

Dear Alumnus,

Your classmates and colleagues are counting on seeing you next month at the Medical Center Alumni Society Conference. Look over the activities. We think you will be as excited as we are.

The three day blend of scientific programs, fellowship and entertainment is packed with features you won't want to miss. For example:

"Teaching, Research and Service," the premiere of a color movie depicting the breadth and depth of activities in your Medical Center. The Medical Center Alumni Society commissioned the film especially for doctors and nurses attending the reunion. Later it will be shown to alumni groups around the country.

"Personnel Needs in the Health Sciences," an examination by four deans and a public health authority of the greatest present challenge in medical care.

The 75th Anniversary Tea of the School of Nursing.

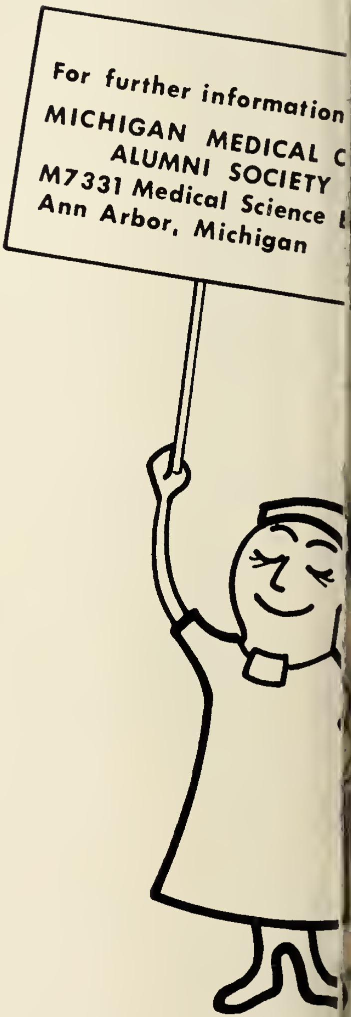
Induction of the Class of 1916 alumni into the Emeritus Club.

The Alumni Dinner-Dance at Washtenaw Country Club, the Alumni Picnic and the football game pitting U-M against Oregon State.

Special programs for wives of the doctors and husbands of the nurses and lady medics.

That's not all, of course, but it gives you an idea of why September 15, 16 and 17 should be red-letter days on your calendar.

So come on back to the Medical Center. It'll be good to see you.



Sincerely,

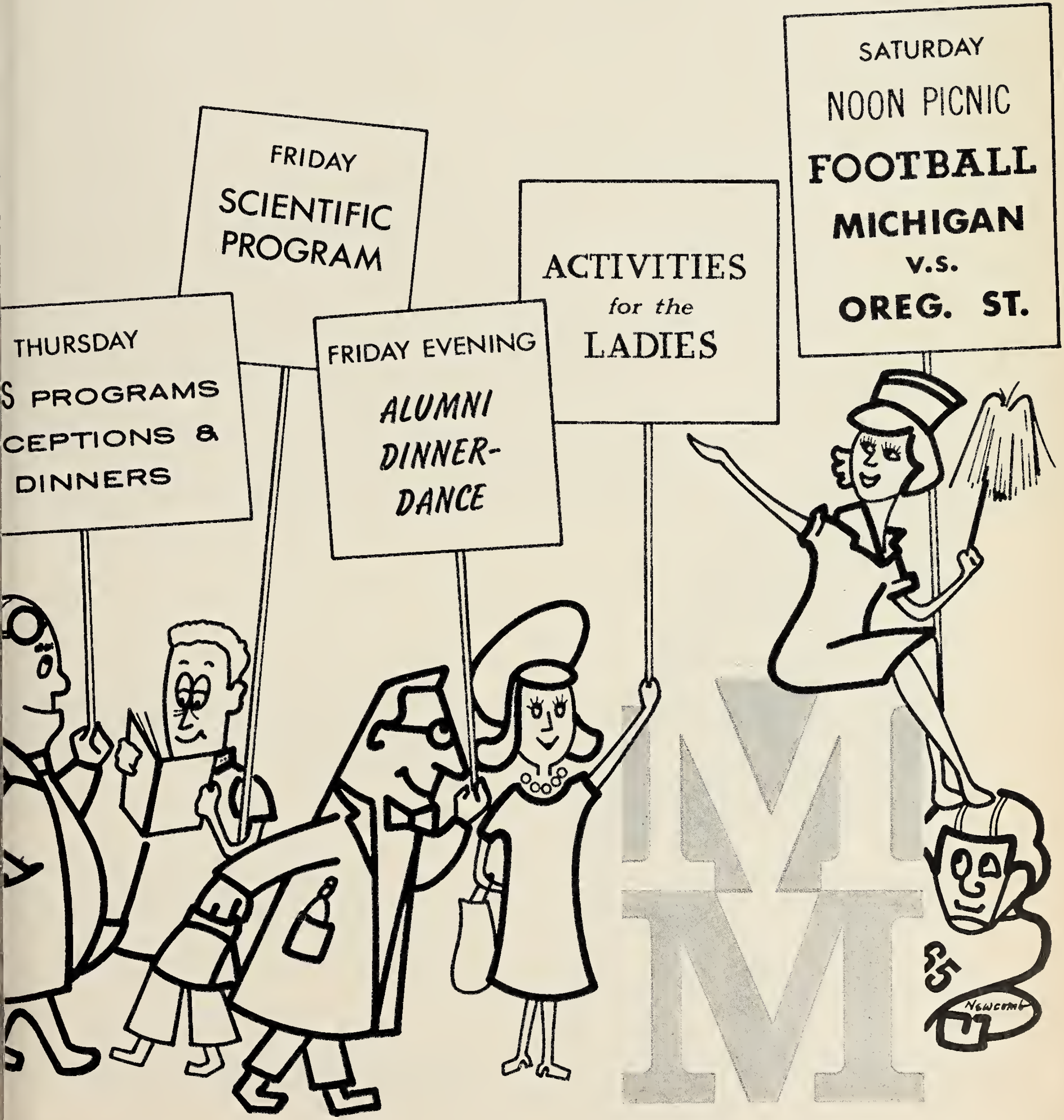
George Morley

George Morley, '49m
Chairman, Publicity

THE UNIVERSITY OF MICHIGAN MEDICAL CENTER
ALUMNI SOCIETY

CONFERENCE - 1966

SEPTEMBER 15, 16, & 17


FRIDAY
SCIENTIFIC PROGRAM
THURSDAY
S PROGRAMS
CEPTIONS &
DINNERS
FRIDAY EVENING
ALUMNI DINNER-DANCE
ACTIVITIES for the LADIES
SATURDAY
NOON PICNIC
FOOTBALL
MICHIGAN
v.s.
OREG. ST.
65
Newcomb

VACANCY FOR ASSOCIATE MEDICAL DIRECTOR

This position in a large company offers opportunity for advancement and has a modern benefit program. Salary open.

Applicant may be a generalist with a sincere interest in industrial type practice, or have special training.

Applicant must have Indiana license or be eligible for same and be in good health.

This is an excellent opportunity in Occupational Medicine which should be investigated to appreciate.

CONTACT: Joseph T. Noe, M.D.
Medical Director
Inland Steel Company
Indiana Harbor Works
East Chicago, Indiana 46312
Telephone: 397-2300, Ext. 2577
Area Code 219

INLAND®

An Equal Opportunity Employer
In the Plans for Progress Program

Horizons Unlimited

Physicians interested in helping to promote medical careers may obtain a copy of the new AMA handbook, "Horizons Unlimited" with eight special insert pages of Michigan information by writing to MSMS, 120 West Saginaw, East Lansing. Copies are being sent to counselors, libraries, youth work leaders, etc., by the MSMS Public Relations Committee.

WSU to Add Two Science Buildings

Construction of Wayne State University's new Natural Science Building and Science Library, to be located on the east side of the Second Avenue Mall between State and Science Halls, is scheduled to begin in September. Total project cost is $9,130,000.

Designed by Ralph Calder and Associates, Inc., architects, Detroit, the buildings will contain 300,000 gross square feet of floor space and consist of two basic components: A four-story science building and a seven-story library tower.

The Science Library will have a capacity of 300,000 volumes, including the Kresge Science Library collection.

Nazareth to Offer Degrees in Nursing

This fall, Nazareth College in Kalamazoo becomes the sixth school of nursing in Michigan to offer the degree program.

Nazareth joins University of Michigan, Michigan State, Wayne State, Mercy College of Detroit, and Madonna College in Livonia—all of which already offer the bachelor's degree.

Mrs. Ann Tardy, speaking on behalf of the *Michigan League for Nursing* says, "We are pleased to see this program opening at Nazareth because of the growing need for nurse educators. The girls who graduate from these degree programs will be our teachers in the future. And the nursing profession needs them badly."

Communications, Easy?

The staff struggles to select the right words for articles and headlines in Michigan Medicine. And we admit, we might miss occasionally.

Words and the way they are used have different meanings. Right?

Take the case of Mrs. Jones who said to her husband, "Those new people down the road seem very devoted."

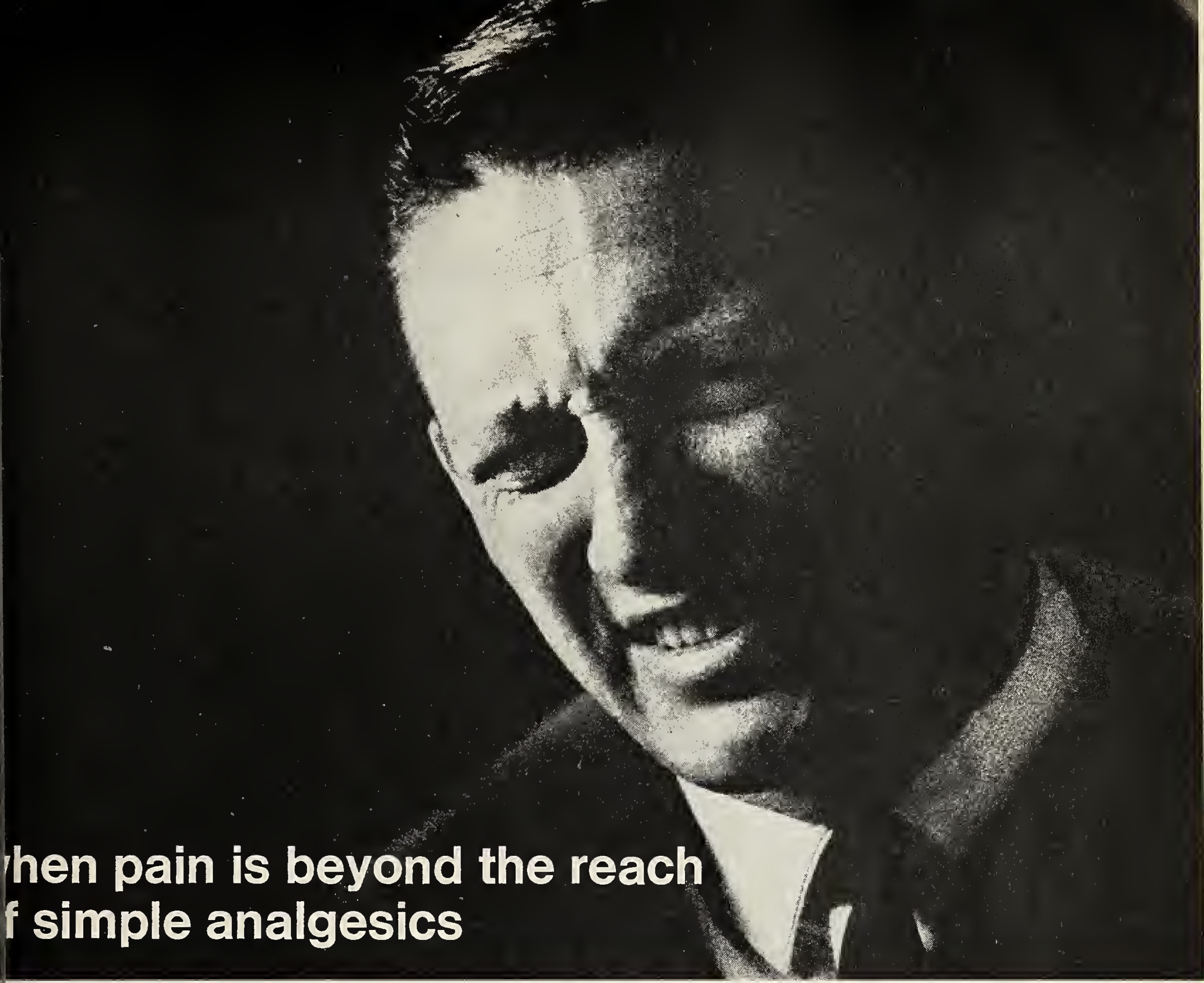
Mr. Jones grunted.

Mrs. Jones continued, "Every time he goes out he kisses her, and then he goes on throwing kisses all down the road. Edward, why don't you do that?"

With a gleam in his eye, Edward replied, "Me

I don't even know the woman!"

Saturday is the most dangerous day to drive. Nearl
22 per cent of all fatal traffic accidents occurred o
that day in 1965.



hen pain is beyond the reach
f simple analgesics

the management of mild to moderate pain, give your patients comprehensive relief.
ANCO-GESIC extends the range of usefulness of aspirin by dimming pain perception—
d *also* reducing mental and muscle tension.

RANCO-GESIC®
tablets
lormezanone 100 mg. with aspirin 300 mg.

ubdues the major
ontributors to pain:

- pain perception
- mental tension
- muscle tension-spasm

TRANCO-GESIC is so well tolerated it can be prescribed for anyone who can take aspirin. It is non-narcotic, and free from dangers of addiction, habituation, or dependence. TRANCO-GESIC is effective in all types of mild and moderate pain. Of 862 patients who were treated with chlormezanone and aspirin for various disorders, 88% reported excellent or good pain relief.[1]

Side effects have been minor. Occasionally gastric distress, weakness, sedation or dizziness occur. Reversible cholestatic jaundice has been reported on rare occasions. However, in 4,653 patients treated with chlormezanone, 97.7% had *no* side effects.[1] *Contraindication:* just one: sensitivity to aspirin. *Dosage:* Adults, usually 2 tablets three or four times daily. Children (from 5 to 12 years), 1 tablet three or four times daily.

1. Collective studies, Department of Medical Research, Winthrop Laboratories.

inthrop WINTHROP LABORATORIES, NEW YORK, N. Y. 10016

PUBLIC RELATIONS

Discusses PR Role In Professional Group

(The Public Relations Society of America has published a booklet about "Association Public Relations." Portions of it will be of interest to MSMS members.)

What is the role of public relations in a professional association? There are four major concerns:

1. To evaluate changes in public opinion that may affect the welfare and interests of the association's membership.
2. To keep its members apprised of the character and significance of such changes.
3. To acquaint its members with governmental actions and with social and economic developments affecting the environment in which they operate.
4. To plan and execute programs aimed at helping its members to meet or adjust to such changes, so that they may better serve the publics with which they deal, and maintain their confidence and respect.

* * *

TWO OTHER QUESTIONS relate closely:

What does an association do?

1. Preparation and dissemination of technical and educational publications, motion pictures and audio-visual materials.
2. Sponsoring conventions and meetings, instructional seminars and exhibitions.
3. Handling government relations, and the interpretation of the legislative and administrative actions of government agencies in terms of members' interests.
4. Compiling and publishing business and industry statistics.
5. Preparing and distributing a wide range of news and informational material to the press, radio and television.
6. Promulgating codes of ethics.
7. Disseminating governmental and other standards to members.
8. Cooperative research: scientific, social and economic.
9. Further good employer-employee relations.

Most of these activities underscore two basic values and functions of the association in America's economy and society: First they provide a means of experience sharing by individuals and entities engaged in the same activity or having a common interest. The benefits of this shared experience accrue democratically to all members, large and small, and might otherwise be unobtainable. Second they make possible—through voluntary, cooperative support—beneficial programs that in most instances could not be undertaken by individual companies or persons. Many medical, engineering, scientific, technological and social advances affecting the lives of all Americans exist only because of such programs.

* * *

WITH WHOM DO associations deal?

A doctor may deal solely with his own patients, or a lawyer primarily with his own clients within a specific locality or within a specialized area of our society or economy.

The professional association seeks to upgrade the quality of services rendered, improve the standards of practice, and further the interests of an entire group of professional personnel—locally, regionally, nationally or internationally.

The publics with whom an association must deal, therefore, are the combined customers, clients and employees of its members, *plus* all those individuals and agencies which directly or indirectly affect their member's business or profession, or their common interests.

BOOKS RECEIVED FOR REVIEW

Illness or Allness, Conversations of a Psychiatrist. By John M. Dorsey. 636 pp. $14.00. Wayne State University Press, Detroit, 1965.

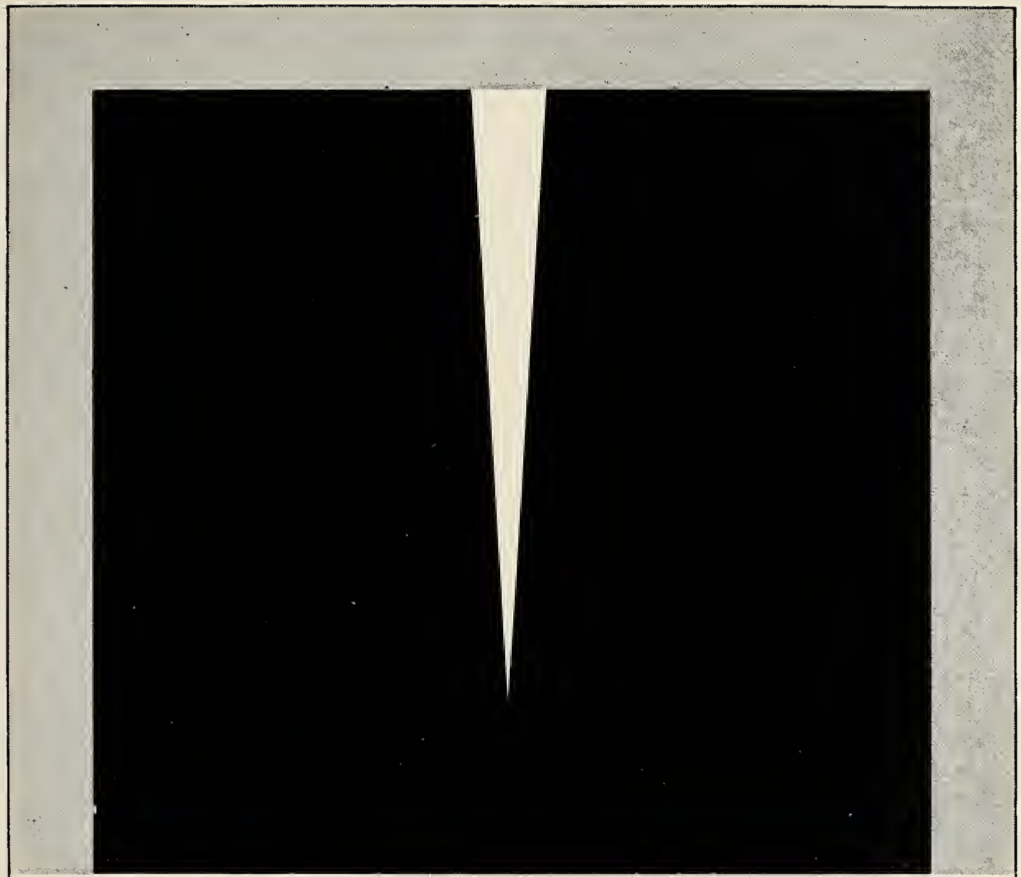
U. S. Army in World War II, The Medical Department Medical Service in the Mediterranean and Minor Theaters. By Charles M. Wiltse. 664 pp. (Illustrated) $5.00. Published by the Office of the Chief of Military History, Department of the Army, Washington, D. C. 1965.

New Drugs. Evaluated by the A.M.A. Council on Drugs. 591 pp. $4.00. American Medical Association, Chicago, 1966.

Annales Immunologiae Hungaricae. 168 pp., 1966 Available from National Medical Library and Center for Documentation, Budapest, Hungary.

WRITERS PLAN CONCLAVE

"The Changing World of Medical Communication" will be the theme of the American Medica Writers' Association annual meeting to be held a the Waldorf Astoria, New York City, Thursday September 29, through Sunday, October 2. Preliminary programs will soon be available from th National Office of AMWA at 2000 P Street, N.W. Washington, D. C. 20036.



incisive

A good way to describe 'Stelazine'. It's different from the tranquilizers that sedate and dull your anxious patients. Its antianxiety effect is direct. On 'Stelazine', your patients can be calmed yet remain alert.

And 'Stelazine' offers additional benefits. Dependence has not been reported. At low doses, side effects are minimal. Its b.i.d. dosage is convenient and economical.

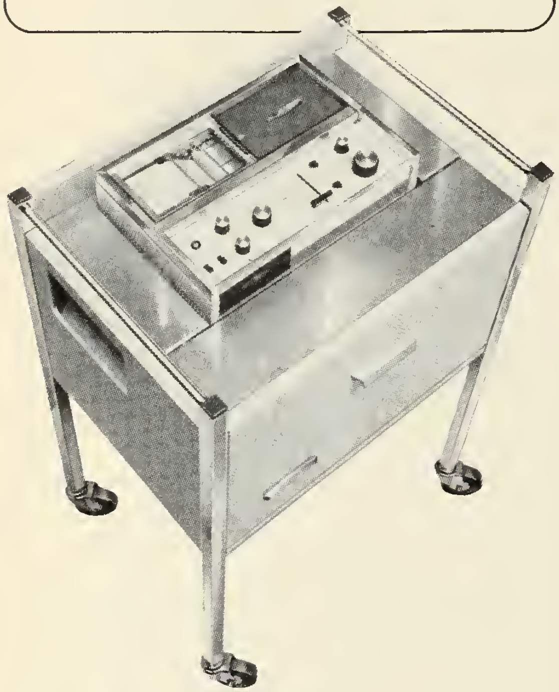
Stelazine®
brand of **trifluoperazine**

The following is a brief precautionary statement. Before prescribing, the physician should be familiar with the complete prescribing information in SK&F literature or *PDR. Contraindications:* Comatose or greatly depressed states due to C.N.S. depressants and in cases of existing blood dyscrasias, bone marrow depression and liver damage. *Precautions:* Use with caution in angina patients and in patients with impaired cardiovascular systems. Antiemetic effect may mask symptoms of other disorders. An additive depressant effect is possible when used with other C.N.S. depressants. Prolonged administration of high doses may result in accumulative effects with severe C.N.S. or vasomotor symptoms. Use in pregnant patients only when necessary for the patient's welfare. *Side Effects:* Occasional cases of mild drowsiness, dizziness, mild skin reactions, dry mouth, insomnia and amenorrhea. Neuromuscular (extrapyramidal) reactions (motor restlessness, dystonias, pseudo-parkinsonism) may occur and, in rare instances, may persist. In addition, muscular weakness, anorexia, rash, lactation, hypotension, and blurred vision have been observed. Blood dyscrasias and cholestatic jaundice have been extremely rare.

For a comprehensive presentation of 'Stelazine' prescribing information and side effects reported with phenothiazine derivatives, please refer to SK&F literature or *PDR.*

Smith Kline & French Laboratories, Philadelphia SK&F

The dramatically new
Burdick EK 4
Electrocardiograph



What is a new ECG?

Take a look at the Burdick EK 4! Many important improvements have been made in electrocardiographs in recent years — this is why we invite your closer inspection of the EK 4. Reliability, diagnostic accuracy, and freshness of design are apparent in every detail. Precise recordings of high fidelity ● Designed for use with auxiliary equipment, phone transmission, permanent recording of monitoring phenomena ● Fast switching from lead to lead ● 25-50 mm. speeds ● ½ x 1 x 2 standardization on all leads ● High frequency response permits use with PC-100 Heart Sound Preamp ● Stable ● Lightweight. If your present ECG can't offer you these up-to-date features, take a closer look at the EK 4. The EK 4 is a sound investment for your practice or department, and it's backed by Burdick dealer service. Write us. The Burdick Corporation, Milton, Wisconsin 53563.

THE G. A. INGRAM COMPANY
4444 Woodward Avenue, Detroit, Michigan 48201
Telephone: TEmple 2-4444

How, When Shoul Publicity Appear?

(The following editorial by Editor Dale Stafford appeared in The Greenville Daily News after he attended the MSMS-sponsored "Conference on Medical News Reporting.")

More and more dialogue is helping bring abo
understanding, reduce frictions.

An example was an all-day session in East Lansi
involving newspapermen and the medical fraterni
I attended as the guest of Dr. Robert E. Rice, M.D
chairman of publicity for the Ionia-Montcalm Me
ical Society.

The health industry is a $34 billion business
the country today; everyone knows it will grow ve
rapidly, way beyond this figure. So it is more i
portant than ever that the people in communicatio
and medicine understand each other more th
they have.

* * *

AS IN EDUCATION the problem is that toda
answers must solve tomorrow's problems; and t
public isn't ready at times to recognize this fact
life.

The session covered many things. An offsh
problem created a lively discussion.

In brief it is how and when to release to the pub
the news of medical research without creating fa
hope all over the world.

A specific example was discussed. Wayne St
University reported on progress toward developme
of an anti-cancer vaccine.

The school has been bombed with thousands
requests for help and obviously at this stage it is
there.

In the words of the youthful originator of t
vaccine research, Doctor Norbert Czajkowski, t
situation stands this way:

"The work presented is of a very prelimin
nature. It suggests that we may have a potent
new form of treatment for cancer, but the work
largely experimental. Under the very best con
tions—enough money, enough personnel—it will
at least two years before we will know if we h
been successful."

Quite obviously these words don't say that Wa
has a cure for cancer.

* * *

I DON'T SAY this to discourage those who h
attached new hopes to Wayne's findings. But
point shouldn't be forgotten that medical advan
however hopeful they may seem at first announ

Say you saw it in Michigan Medicine

ent, must be tested with utmost care before they ın safely be applied to great numbers suffering om this or that disease.

As Doctor Czajkowski notes, under the best cirımstances it will be some time—a dishearteningly ng time, for cancer victims and those closest to ıem—before success is assured.

That is a tragedy. Not only communications peoe but the medical research centers face a genuine oblem in what to tell a public that is ready to asp for any hope.

The widely circulated American Medical Associan Journal carried news of this particular research. ankly, in the field of cancer in particular I lean the notion that it might be wise to erect new d light signals on progress reports.

There was no unanimity of opinion at the meeting, the way.

But every writer there left with a resolve to be re cautious than ever in handling medical news. one wants to involve himself in building hopes fore they are justified.

In one man's opinion there can't be too much straint.

ISMS PR Library)ffers New Book

Many recent books are available for MSMS mem-rs from the MSMS Public Relations Library . . . . . . and one of the newest additions is "Caring for Aged" by Bertram B. Moss, M.D., published by oubleday.

In the introduction, Doctor Moss reports that "we ve examined a wide variety of problems that older nericans encounter today, and have attempted both find the answers to the questions of their families d to pass along this information in non-technical guage."

The book is of added interest to Michigan because was jointly written by Doctor Moss with Fraser nt, who formerly covered MSMS medical meets in Detroit for the *Windsor Star.*

AMA REEL HELP

From 3,007 bookings of educational films in 1955, 11,635 in 1966, is the record of the AMA's Film orary. Films have been loaned to physicians, medistudents, nurses and professional groups, the largsingle users being civilian hospitals and schools of rsing.

For information on films, write AMA Film Library, North Dearborn Street, Chicago 60610.

Response to Facts Alone Is Unlikely

The assumption that people will respond to the presentation of facts is false.

So declared Harold Mendelsohn, M.D., University of Denver, at the National Conference on Rural Health. MSMS was represented at that conference by Robert E. Rice, M.D.; Greenville, who relayed the following comments by Professor Mendelsohn.

As an example of response to facts, Professor Mendelsohn compared the tremendous response in polio campaigns (a disease which is actually relatively of minor total significance) to the lack of reaction or actual antagonism to matters of fluoridation of water for dental caries which affects over 90 per cent of the people. Professor Mendelsohn added:

Responses to stimuli may be variable. The fact that someone is exposed to a stimulus does not necessarily mean there will be any effect or the desired effect.

The response to any given stimulus may be only partially rational. People respond to internal stimuli and to external stimuli either positively or negatively, he explained. The professor suggested:

The application of mass communication approaches might be classed as the hyperdermic approach, which is of rather doubtful value, or the aerosal approach in which some bits hit the target, most drift away and a little penetrates. There are intervening factors such as selectivity in which one chooses what one wants to see or hear and, because of this, conversion to different ideas often does not work very well.

"In changing attitudes, one must create a predisposition to act," he advised.

One cannot change attitudes or actions by mass communication alone. This depends considerably upon the concerns of the people who want to feel loved or pretty or successful, etc. Also, they must be told how to react in a persuasive manner, he stressed.

Christophers Urge Careers In Health

A million qualified health service workers will be needed in the next ten years. Meanwhile, critical shortages are slowing down health services among the population at large.

Each year for the next decade 10,000 nurses, medical technicians and other health workers must be recruited and trained.

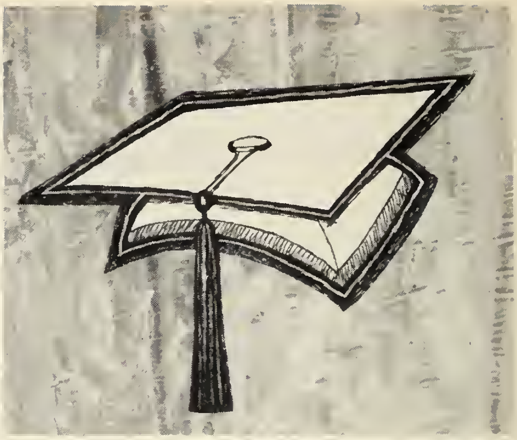
As a "committee of one," encourage those with ability and motivation to become health workers.

The Christophers

This appealing photo is on the cover of a Michigan Blue Shield publication, "Looking for a Career Today?" which appeals to girls to consider careers in nursing. Blue Shield, MSMS and other organizations are pointing out the need for 4,700 registered nurses and more than 3,000 practical nurses in Michigan today. Copies of the Blue Shield folder are available from Blue Shield Public Relations, 441 East Jefferson, Detroit 48226.

Blue Shield Folder Boosts Health Careers

Congratulations were extended to the summer graduates by Michigan Blue Shield in a brochure with this symbolic sketch of a graduation cap. The folder asked the high school graduates: "Would you believe there are 116 Michigan colleges and hospitals that offer health career training and educational programs varying from less than a year to more than four?"



The folder then suggested that the youth interested in the health vocations write for a copy of the AMA Horizons Unlimited career handbook with the MSMS-prepared insert of Michigan information.

Interested physicians also may obtain a copy o the pocket book to help recruit talented young people and to help with the next speech before a service club or school assembly. Write to MSMS, 120 Wes Saginaw, East Lansing, for your copy.

OFFER NEW FILM

"Thyroid Deficiency—Current Concepts of Diagnosis and Treatment" is the title of a new film now available to the medical profession. Five prominen endocrinologists discuss and present in a symposium recognition, treatment and the major clinical aspects of hypothyroidism in the adult and in the child. This 30-minute, 16 mm sound film is in color. It i available on loan from Flint Laboratories, manufacturers of Synthroid, 6301 Lincoln Avenue, Morton Grove, Illinois.

Established 1924

MERCYWOOD HOSPITAL

4038 Jackson Road *Conducted by Sisters of Mercy* Ann Arbor, Michigan

Telephone—313 663-8571

Mercywood Hospital is a private neuro-psychiatric hospital licensed by the Michigan Department of Mental Health. Mercywood specializes in intensive, multi-disciplinary treatment for emotional and mental disorders.

Accredited by the Joint Commission on Accreditation of Hospitals and the National League of Nursing. A full Blue Cross participating hospital.

Certified for: Medicare and M.A.A. programs.

PSYCHIATRIC STAFF

Robert J. Bahra, M.D.
Dean P. Carron, M.D.
Francis M. Daignault, M.D.
Gordon C. Dieterich, M.D.
Stuart M. Gould, Jr., M.D.
Leonard E. Himler, M.D.
Stephen C. Mason, M.D.
Richard D. Watkins, M.D.
Rudolf E. Nobel, M.D.
Sydney Joseph, M.D.
James R. Driver, M.D.

what
time
is it?

For the past
two years
there's been
one new case
of active tuberculosis
reported for every
four thousand
of U.S. population.

it's time
to tine.

Tuberculin,
Tine Test

Lederle

Available in 5's and 25's.
Order now
from your pharmacist
or your Lederle
representative.

LEDERLE LABORATORIES, A Division of American Cyanamid Company, Pearl River, New York Lederle
414-6—4046

Explain HB 4003 Re Title XIX

The first of three parts of HB 4003—The Michigan Plan to Implement Title XIX for the medically indigent—goes into effect October 1.

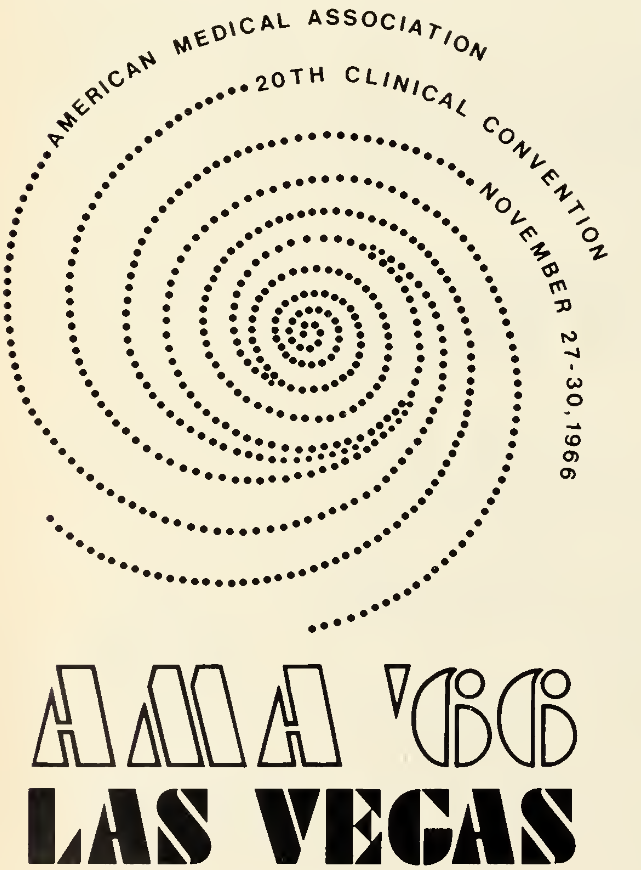
The bill, signed by goveror Romney in July, takes advantage of a state-federal matching basis of 50-50.

Major provisions and dates for the various parts of this program are as follows:

October 1, 1966—hospital and outpatient physician services;

January 1, 1967—home and office physician services and pharmaceutical services;

April 1, 1967—dental services and benefits such as prosthetics, eyeglasses and ambulances.


AMERICAN MEDICAL ASSOCIATION
20TH CLINICAL CONVENTION
NOVEMBER 27-30, 1966
AMA '66
LAS VEGAS
The complete scientific program, plus forms for advance registration and hotel accommodations, will be featured in JAMA October 24.

Ceilings will be fully removed on grants for Ol Age Assistance, Aid to the Blind and Aid to the Disabled, on October 1.

Simultaneously, ceilings will be raised on Aid t Dependent Children and completely removed o January 1, 1967.

* * *

APPROXIMATELY 200,000 Michigan resident now receiving money and checks under welfare programs for dependent child family groups, the age not covered by Social Security, and the disabled an blind will be covered. It is estimated that 600,00 residents will receive benefits.

Single persons qualify when medical expenses reduce their gross annual income to $1900 or less. Th level for couples is $2700 with $400 allowed for eac dependent.

Unlike Title XVIII of Medicare, where the physician has a choice of either direct billing or assignment for his fees, the physician will not have thi choice. All Title XIX charged will be on assignment

Albert E. Heustis, M.D., Director of the State Department of Public Health, says that every residen eligible for Title XIX will find an approved hospita in his area. As of June 30, 190 hospitals had bee certified out of 287 applications, and all but a handful of those will receive certification. Twenty-eigh home health agencies have already been certified These agencies provide health services in patient' homes after release from hospital.

* * *

GENERAL PROVISIONS of the Michigan la include;

1. Old Age Assistance—
   —65 years or older;
   —Resident of Michigan for at least one year, o reciprocal residency from another state;
   —Not an inmate of an institution;
   —Has no person or organization responsible fo his support able to render assistance;
   —Has not assigned or transferred any real o personal property or income within five years;
   —Does not have sufficient income to provid reasonable subsistence;
   —Does not own tangible or intangible propert with a market value in excess of $750, or, if ma ried and not separated from spouse, value of prop erty cannot exceed $1,000;
   —Occupied homestead not included and life i surance of a value of $1,000 or less not include in determining the value of property;
   —Other exclusions, such as household good wearing apparel, farm stock or implements wit a value of less than $750.
2. Aid to the Blind—
   —Has no vision, or with correcting glasses vision

so defective as to prevent ordinary activities;
—Not sufficient income or other resources;
—16 years of age or older;
—Residence in state for one year or lost sight after becoming resident or reciprocal residency requirements from another state;
—Is not receiving Old Age Assistance or is not an inmate of any institution;
—Does not solicit alms;
—Has not signed or transferred real or personal property within five years.
—Generally, persons eligible for care under this program would not be entitled to benefits under the Workman's Compensation law.

Patients Lack Medicare Details

The physicians of Michigan during the first two onths of Medicare report that the major problem emed to be lack of understanding by the patients out what is covered under the new law. Feedback om the physicians of the state indicated considerble confusion among the public about how Medire works.

As Medicare went into effect July 1, there were no ajor difficulties. The predicted turmoil did not cur in Michigan in July and the admissions to hostals and clinics continue at their normal pace. Most spitals have found no great influx of elderly paents.

Many physicians have purchased special handbooks bout Medicare as published by various firms so ey can help answer questions from their patients. Comments at county medical society and hospital aff meetings reportedly center around the increase paper work. Medicare has created an administrave burden for hospitals, clinics and physicians beuse it has forced them to keep special records for e Medicare patients.

* * *

MOST OF THE planning for the operation of edicare as it relates to the patient and the care receives was done under the scrutiny of Medicare. an advisory capacity, Michigan doctors of medine have participated in the deliberations of govnmental agencies (local, state and national), voltary medical insurance companies, hospital ornizations, public health and social welfare agencies d legislative bodies. This has been carried out by Michigan State Medical Society on the state vel, by its component societies on the local level d through the American Medical Association in tional planning.

Most doctors in Michigan seem to be collecting their fee as they always have from the patient and thus letting the insurance carrier reimburse the patient. Under law, direct billing or the assignment alternative are equally acceptable.

Any questions about the amount of payment in any particular care are being resolved in the customary manner. Questions will be considered as they always have been by discussions between the beneficiary, the physician and the claims-paying organization. Where the question is raised by the physician, it generally will be resolved informally between the physician and the carrier. Insurance review committees have been in existence in county medical societies to provide procedures for the review of difficulties. Other committees exist if the informal methods do not fully satisfy the interested parties.

* * *

MSMS MEMBERS HAVE been clarifying some enrollment questions. Elderly patients who are nearing their 65th birthday may enroll early for voluntary coverage for physician's services so they can be covered on the day of their 65th birthday. The law provides that a person may enroll as early as three months before his 65th birthday. It also provides for a total, six-month enrollment period, including three months after his birthday anniversary. During this last three-month period, he will become eligible for coverage one month after his enrollment.

If the person who becomes 65 lets his full six-month enrollment period go by, then he must wait until the next scheduled general enrollment period, now scheduled to be from October 1 to December 31 of 1967.

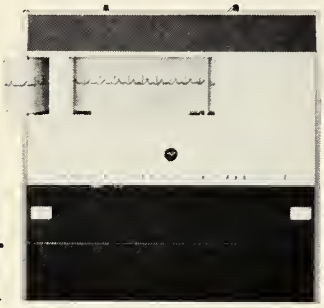
Michigan doctors report that some questions have popped up because the patients as yet do not understand what is *not* covered by Medicare.

Some things *not* covered under the hospital insurance portion of Medicare are physician's and surgeon's services; private room; private duty nurse; cost of first three pints of blood, and such personal items as telephone, radio or television in your room; and prescription drugs.

Some items *not* covered under the medical insurance portion of Medicare include routine physical checkups; false teeth or routine dental care, immunizations, patent medicines, eye glasses or examinations thereto; hearing aids or the examinations thereto; and orthopedic shoes.

VOTE AS YOU PLEASE,
BUT PLEASE VOTE NOV. 8

if you've ever had to hunt for
your ECG cables, straps, electrodes
...pull out the wall plug
and reverse it...struggle with
paper that wouldn't thread
...or needed a faster chart
speed or different sensitivity...

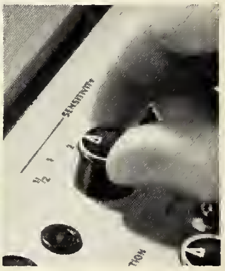


then
you
should have a 500 Viso
to save you time.

All electrodes, straps, Redux Creme and cables store conveniently inside 500 Viso.

Reverse power line polarity on 500 by pushbutton.

Reload Permapaper chart rolls with no threading, in seconds (one roll makes 25 12-lead tests).



All 500 Viso's have 25 and 50 mm/sec. chart speeds ... ½, 1 or 2X sensitivity settings for optimum trace amplitude.

HEWLETT
PACKARD hp SANBORN
DIVISION

Measuring for Medicine and the Life Sciences

31 New Laws Concern MD's

y M. A. Riley
ISMS Legislative Representative

During the 1966 Michigan legislature, 331 new ws were passed and adopted—with 31 of special terest to MSMS members.

Attached are brief descriptions of these 31 bills, explained in the Gongwer News Service report.

Interested members may obtain copies of any of ese new laws, by writing to Legislative Department, SMS, 120 West Saginaw, East Lansing.

The following descriptions indicate the number the Public Act, with the number of the enrolled ll shown in parenthesis. Some of the bills were ven Immediate Effect, and the descriptions so incate that information with the date, such as "I.E. 10-66."

The bills that become law "after sine die" will not come effective in March, which the legislature s not officially adjourned but only recessed.

(H 2425) HEALTH, MENTAL—Increases the te matching grants for a community mental health ogram from a 40 per cent to 60 per cent minimumaximum to a flat 75 per cent; eliminates the $1 per pita restriction on maximum costs of a program; minates a provision that prohibited treatment at mmunity clinics of those who can afford to pay available private facilities; requires all members the community mental health board to be legal idents of the county, cities or counties on whose ard they are appointed; and allows any community ntal health board to elect to participate in the te Employes' Retirement System. I.E. 3-10-66

(S 717) PUBLIC HEALTH—Provides that those ally responsible for the cost of care of a patient a public mental institution shall be the patient's ate, children over 21 years of age, spouse and the tural or legally adoptive parents of a child, and that y shall be jointly and severally liable for the cost. ective 90 days after sine die.

(H 3579) HEALTH, REGISTRATION—Allows State Board of Physical Therapy Registration to end the deadline for accepting applications from tain physical therapists to July 15, 1967. I.E. -66

(H 2477) PUBLIC HEALTH—Exempts social chologists from the provisions of the Psychologist gistration Act. The Department of Licensing and gulation will make the final determination as to ether a person fulfills the requirements for the eption. I.E. 6-10-66

(H 3159) PUBLIC HEALTH, EPILEPTICS—Includes any epileptic admitted to the Caro State Hospital for Epileptics in the act governing the liability of relatives for the care and maintenance of mentally retarded persons admitted to public institutions. I.E. 6-10-66

(H 3158) MENTAL HEALTH—Provides that admission of voluntary patients to the inpatient service of the Lafayette Clinic shall conform to the present statutory provisions regarding voluntary admissions to State mental health institutions. I.E. 6-14-66

(H 2712) PUBLIC HEALTH, CHIROPRACTORS—Provides that a chiropractor shall be reimbursed for a service if an insurance policy provides for reimbursement of such a service and that the chiropractor is authorized to provide the service under the provisions of his licensing act. I.E. 6-15-66

(H 3202) GOVERNMENT, AIR POLLUTION—Provides that the six persons appointed by the Governor with the advice and consent of the Senate to the Air Pollution Commission shall serve three-year rather than six-year terms. Also provides that air pollution means the presence of air contaminants which are injurious to human life or property or which reasonably interfere with the enjoyment of life or property or are reasonably detrimental to plant and animal life. The prior law required a contaminant to meet both criteria. I.E. 6-16-66

(H 3197) MENTAL HEALTH—Authorizes a community mental health board to execute working agreements with public and private social service agencies and with other educational and judicial agencies. The agreements are subject to the provisions of the act providing for establishment of community mental health service programs and rules and regulations of the Department of Mental Health. I.E. 6-22-66

(H 3173) BUSINESS, DRUGS—Deletes a superceded restriction regarding the use of paregoric in the Uniform Narcotic Drug Act. Effective 90 days after sine die.

(H 3193) BUSINESS, DRUGS—Places some new restrictions on the sale of medicine containing small amounts of narcotic drugs and clarifies their exempt status. Effective 90 days after sine die.

(S 958) PUBLIC HEALTH, TUBERCULOSIS—Allows county tuberculosis hospitals to borrow money for treatment of contagious diseases other than tuberculosis. I.E. 6-23-66

(S 1001) PUBLIC HEALTH—Provides that the director, his representative or an employe of the

Legislative/continued

Department of Public Health shall not be personally liable for damage sustained by any person because of any action performed or done by such persons in the performance of their duties in the administration and enforcement of State Health Laws. This provision does not apply where the damages were sustained as a result of negligence by the director, his representative or an employe of the Department. Effective 90 days after sine die.

(S 822) PUBLIC HEALTH—Requires any facility providing for the group residence, care, education or camping experience of children to have on file for each child a statement signed by a licensed physician that the child has had a diagnostic test to determine the presence of infection from tuberculosis and has been immunized against smallpox, diphtheria, tetanus, measles, pertussis (Whopping cough) and poliomyelitis. No child whose parents have religious convictions against immunization shall be required to be immunized. Effective 90 dayys after sine die.

(S 981) PUBLIC HEALTH—Provides that basic State grants to counties for public health services be distributed on the basis of not less than 20 cents per capita, with no county receiving less than $8500. The act also raises the maximum amount of the basic grant from 40 per cent to 50 per cent of the maintenance cost of the local health department. I.E. 7-1-66

(H 3344) MENTAL HEALTH—Creates a center for forensic psychiatry for the diagnosis, treatment and evaluation of patients committed to the Department of Mental Health by criminal courts. I.E. 7-1-66

(S 991) PUBLIC HEALTH—Requires the Department of Social Services to establish minimum housing standards for the maintenance of health and decency for recipients of welfare funds. Public assistance grants authorized under the Social Welfare Act shall not be used to pay rent for any dwelling that does not meet the standards established under this act. I.E. 7-1-66

(S 1109) LEGAL, IMMUNITY—Protects county, city and district health department personnel from being personally liable in a civil action brought as a result of any act done or omitted in the discharge of their duties. Does not apply in cases where health department personnel were negligent. Effective 90 days after sine die.

(H 3080) PUBLIC HEALTH—Includes measles among the immunization or protection a child must have before enrolling in any school for the first time. I.E. 7-11-66, Effective 1-1-67

(H 3085) GOVERNMENT, LOCAL—Allows the legislative bodies of local units of government operating a community hospital to levy up to two mills for not more than 10 years for capital improvements if approved by a majority voting thereon at a genera election. I.E. 7-11-66

(S 944) LAW ENFORCEMENT, DRUGS—Provides that any person who violates provisions of th State Dangerous Drug Act is guilty of a misdemeanor Makes it a felony for any person, firm partnershi or corporation to sell, offer to sell, barter, dispos of or possess D-lysergic acid diethylamide (LSD) peyote, mescaline and its salts, dimethyltrypatmin psilocyn, or psilocybin, except under the direction o authorization of the Department of Mental Healt or unless in accordance with the Federal Food Dru and Cosmetic Act. I.E. 7-11-66, effective 9-1-66

(H 3997) Welfare—Provides that the amount o Old Age Assistance shall be fixed according to th condition of the individual, community and circumstances in each case. The previous limits of $90 month or $140 a month for hospitalization or care i a convalescent home are deleted. Also provides tha the State Department of Social Services may pay fo medical care received by a recipent of Aid to the Disabled, Aid to the Blind and Aid to Dependent Children. I.E. 7-11-66, effective 8-1-66

(H 3996) WELFARE—Authorizes the Social Services Department Director to make family plannin advice available to a licensed medical doctor or osteopathic physician upon request and referral by public assistance recipient. Necessary drugs an recognized medical equipment may also be mad available through a licensed pharmacist upon prescription issued by a licensed physician. I.E. 7-11-6

(S 1060) MENTAL HEALTH—Changes th formula for determining when the operation of county infirmary and county medical care facilit for mental patients is placed under the control of board of county institutions from the number of patients in the institution to the population of th county. Places facilities in a county with a popula tion of more than one million (Wayne) under th control of a board of county institutions. I.E. 7-11-6

(H 3821) INSURANCE, HOSPITAL—Provide that the termination of dependent coverage in contract or insurance policy delivered in the stat providing hospital care or reimbursement for suc care of the policyholder and dependents shall n apply to an unmarried child of the policyholder wh is incapable of self-support due to mental retardatio or physical handicap if he is dependent upon th policyholder for support and maintenance. Polic holder must submit satisfactory proof of the depen ent's incapacity to the insurance company within 3 days after the child attains the age limit. I.E. 7-12-6

(H 3427) INSURANCE, HOSPITAL—Provid that a certificate providing prepaid hospital ca which terminates coverage of the policyholder's d pendent at a specified age shall not apply if the d pendent is an unmarried child incapable of self-su

IT'S AS PLAIN
AS THE
NOSE ON HIS
FACE.

UP TO 10–12 HOURS' CLEAR BREATHING ON ONE TABLET

Dimetapp® Extentabs®

(Dimetane® [brompheniramine maleate], 12 mg.; phenylephrine HCl, 15 mg.; phenylpropanolamine HCl, 15 mg.)

In sinusitis, colds, or U.R.I., Dimetapp lets congested patients breathe easy again. Each Extentab brings welcome relief all day or all night, usually without drowsiness or overstimulation. Its key to success? The Dimetapp formula—Dimetane (brompheniramine maleate), a potent antihistamine reported in one study to have elicited side effects as few as the placebo,* teamed with decongestants phenylephrine and phenylpropanolamine—in a dependable 10- to 12-hour form.

Schiller, I. W., and Lowell, F. C.: New England J. Med. 261:478, 1959.

Contraindications: Patients hypersensitive to antihistamines. Not recommended for use during pregnancy.

Precautions: Until the patient's response has been determined, he should be cautioned against engaging in operations requiring alertness. Administer with care to patients with cardiac or peripheral vascular diseases or hypertension.

Side Effects: Hypersensitivity reactions including skin rashes, urticaria, hypotension and thrombocytopenia have been reported on rare occasions. Drowsiness, lassitude, nausea, giddiness, dryness of the mouth, mydriasis, increased irritability, or excitement may be encountered.

Dosage: 1 Extentab morning and evening, or as needed.

Supplied: Bottles of 100 and 500.

Also available: Dimetapp® Elixir for conventional *t.i.d.* or *q.i.d.* dosage.
See package insert for further details.

A. H. ROBINS CO., INC.
RICHMOND, VIRGINIA 23220
A-H-ROBINS

The full ¼ grain of phenobarb in the formula

takes the nervous edge off the pain ...helps bring out the best in codeine

Phenaphen® with Codeine

the only leading compound analgesic that calms instead of caffeinates

Each capsule contains:

Phenobarbital (¼ gr.)	16.2 mg.
(Warning: may be habit forming)	
Aspirin (2½ gr.)	162.0 mg.
Phenacetin (3 gr.)	194.0 mg.
Hyoscyamine sulfate	0.031 mg.
Codeine phosphate	¼ gr. (No. 2), ½ gr. (No. 3), 1 gr. (No. 4)
(Warning: may be habit forming)	

Contraindications: Hypersensitivity to any ingredient.

Precautions: As with all phenacetin-containing products, avoid excessive or prolonged use.

Side Effects: Side effects are uncommon—nausea, constipation, and drowsiness have been reported.

A·H·ROBINS

A. H. ROBINS CO., INC., Richmond, Va. 23220

aining employment because of mental retardation r physical handicap. Applies to certificates issued by onprofit hospital service corporations and any other rganizations providing prepaid hospital care in Mihigan. Policyholder must submit satisfactory proof f the dependent's incapacity to the insurance comany within 31 days after the child attains the age mit. I.E. 7-12-66

(S 950) GOVERNMENT, DRUGS—Empowers ıe State Board of Pharmacy to revoke any license sued by it for violations of the Uniform Narcotic 'rug Act. I.E. 7-12-66

(S 817) PUBLIC HEALTH, REGULATIONS—uthorizes the Department of Public Health to make ıles and regulations to require an annual examina-n of persons who by nature of their occupation uld constitute a public health hazard if infected ith communicable tuberculosis. I.E. 7-14-66

(S 288) GOVERNMENT, MARRIAGE COUN-ELORS—Provides for the certification of marriage unselors and the establishment of a seven-member ard of Marriage Counselors within the Department Licensing and Regulation. Does not apply to such rsons as certified consulting psychologist, a licensed torney or physician if they do not advertise or ld themselves out as marriage counselors and do t collect a fee for counseling. Annual license fee 5. I.E. 7-14-66

(S 1119) PUBLIC HEALTH, FRAUD—Makes it misdemeanor for any person or enterprise to offer or lvertise that a health cure is endorsed by the medical ofession or to be administered under the supersion of a physician when such is not the case. The ense may be punished by a fine of up to $1000, ıprisonment for up to one year, or both. Effective days after sine die.

(H 4003) PUBLIC HEALTH, MEDICARE—equires the Department of Social Services to estabh a program to implement Medicare. I.E. 7-19-66, fective 9-1-66

TO THE LADIES

I hope that every physician's wife will support the medical political action committee in her state and AMPAC nationally.

Only by working together can we become an effective bipartisan force, dedicated to realistic political aims and obectives.

Charles L. Hudson, M.D.,
AMA President

MICHIGAN AUTHORS

J. M. Kaufman, M.D., Royal Oak, and **R. D. Anslow, M.D.,** Detroit, "Treatment of Refactory Angina Pectoris," Journal American Medical Association, April 11, 1966.

G. C. Timmis, M.D., Seymour Gordon, M.D., and **J. O. Reed, M.D.,** Detroit, "Spontaneous Closure of an Atrial Septal Defect," Journal American Medical Association, April 4, 1966.

R. E. Taber, M.D., Detroit, **Emir Zikria, M.D.,** Pittsburgh, **E. A. Hershey, M.D.,** and **C. R. Lam, M.D.,** Detroit, "Prevention of Emboli With a Vena Caval Clip," Journal American Medical Association, March 14, 1966.

R. D. Stewart, M.D., Midland and **J. T. Andrews, M.D.,** Buffalo, "Acute Intoxication with Methylchloroform," Journal American Medical Association, March 14, 1966.

G. L. Brinkman, M.D., Detroit and **D. L. Block, M.D.,** Dearborn, "The Prognosis in Chronic Bronchitis," Journal American Medical Association, July 4, 1966.

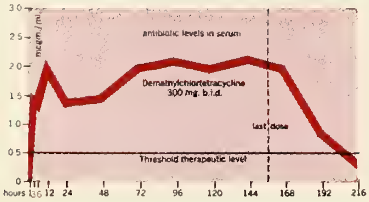
Milton W. White, M.D., "Biochemical Impermability of Cancerous Tissue," Journal of Abdominal Surgery, April 1966.

Three members of MSMS who have been elected statewide to office confer at the MDPAC Workshop in Detroit with James J. Lightbody, M.D., far right, Detroit, Speaker of the MSMS House of Delegates. Left to right, the group includes, DeWitt T. Burton, M.D., Detroit, member of the Wayne State University Board of Governors; Leon Fill, M.D., Detroit, member of the State Board of Education; and Alfred T. Whitaker, M.D., Detroit, also a member of the WSU Board.

greater potency

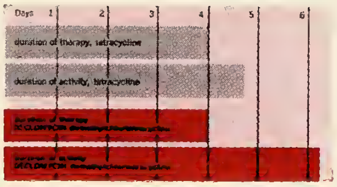
lower mg intake per day

600 mg versus 1,000 mg



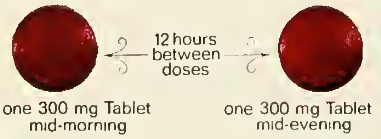
high activity

From Sweeney, W. M., Dornbush, A. C., and Hardy, S. M.
Amer. J. Med. Sci. 243:296 (Mar.) 1962



1-2 "extra" days' activity

after the last dose to protect against relapse



It's made for b.i.d.

in G.U. infections
broad-spectrum performance

DECLOMYCIN®
DEMETHYLCHLORTETRACYCLINE

Effective in a wide range of everyday infections—respiratory, urinary tract and others—in the young and aged—the acutely or chronically ill—when the offending organisms are tetracycline-sensitive.

Contraindication—History of hypersensitivity to demethylchlortetracycline.
Warning—In renal impairment, usual doses may lead to excessive systemic accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated and, if therapy is prolonged, serum level determinations may be advisable. A photodynamic reaction to natural or artificial sunlight has been observed. Small amounts of drug and short exposure may produce an exaggerated sunburn reaction which may range from erythema to severe skin manifestations. In a smaller proportion, photoallergic reactions have been reported. Patients should avoid direct exposure to sunlight and discontinue drug at the first evidence of skin discomfort.
Precautions and Side Effects—Overgrowth of nonsusceptible organisms may occur. Constant observation is essential. If new infections appear, appropriate measures should be taken. Use of demethylchlortetracycline during tooth development (last trimester of pregnancy, neonatal period and early childhood) may cause discoloration of the teeth (yellow-grey-brownish). This effect occurs mostly during long-term use but has also been observed in short treatment courses. In infants, increased intracranial pressure with bulging fontanels has been observed. All signs and symptoms have disappeared rapidly upon cessation of treatment. Side reactions include glossitis, stomatitis, proctitis, nausea, diarrhea, vaginitis and dermatitis. If adverse reaction or idiosyncrasy occurs, discontinue medication and institute appropriate therapy. Anaphylactoid reactions have been reported.

Average Adult Daily Dosage: 150 mg q.i.d. or 300 mg b.i.d. Should be given 1 hour before or 2 hours after meals, since absorption is impaired by the concomitant administration of high calcium content drugs, foods and some dairy products.
Capsules: 150 mg; *Tablets:* film coated, 300 mg, 150 mg, and 75 mg of demethylchlortetracycline HCl.

LEDERLE LABORATORIES, A Division of AMERICAN CYANAMID COMPANY, Pearl River, New York
675-5-2907

Q AND A ABOUT MDPAC OPERATIONS

From time to time, doctors make inquiry about IDPAC. The following information helps in answer-ng these questions.

. WHAT IS MDPAC?

The Michigan Doctors Political Action Committee a voluntary, non-profit, unincorporated group whose embership consists of physicians, their wives and thers.

. WHY WAS MDPAC ORGANIZED?

Because the medical profession needs an organiza-on through which its members can participate effec-vely in public affairs. MDPAC's dual role is to fur-ner the political knowledge of its members and pro-ide them with the means for concerted political ction.

. IS MDPAC AFFILIATED WITH EITHER MAJOR POLITICAL PARTY?

No. It is bound neither by Democratic nor Repub-can party labels. The program and platform of the dividual candidate determines whom MDPAC sup-orts—not the candidate's party affiliation.

WHO DIRECTS MDPAC'S ACTIVITIES

A 25-member Board of Directors—24 physicians d one member representing the Woman's Auxiliary.

5. IS MDPAC A PERMANENT ORGANIZATION?

Yes. Experience proves that one-shot programs of political education or action just do not get results.

6. HOW DOES MDPAC USE ITS FINANCIAL RESOURCES TO BEST EFFECT?

First, through education. MDPAC services its members with voting records; party organizational structure, and similar subjects.

Second, MDPAC follows proven campaign techniques and selects candidates for support on a realistic basis. Target areas are chosen after thorough analysis at the local level; after consideration of the candidate's voting record and political principles; and after thorough study of the many factors that determine his chances of winning.

Third, MDPAC coordinates its efforts with those of other groups—medical and non-medical—who are actively engaged in working for better government.

Fourth, MDPAC voluntarily remits 40 per cent of each member-dollar to AMPAC (American Medical Political Action Committee) thus giving dual membership to MSMS members.

* * *

Memberships may be mailed to: Michigan Doctors' Political Action Committee, Box 169, East Lansing.

★

Specialized Service

IN

PROFESSIONAL LIABILITY INSURANCE

is a high mark of distinction

THE
MEDICAL PROTECTIVE COMPANY
FORT WAYNE, INDIANA

Professional Protection Exclusively since 1899

DETROIT OFFICE: G. A. Triplett, R. K. Wind and R. H. Harp, Representatives
2405 West McNichols Road, Detroit 48221 Telephone: 313-862-8064

GRAND RAPIDS OFFICE: G. J. Haworth, Representative
422 Federal Square Building, Grand Rapids 49502 Telephone: 616-454-4477

Norinyl® tablets

(norethindrone 2 mg. c̄ mestranol 0.1 mg.)

for multiple contraceptive action that has produced a record of unexcelled effectiveness

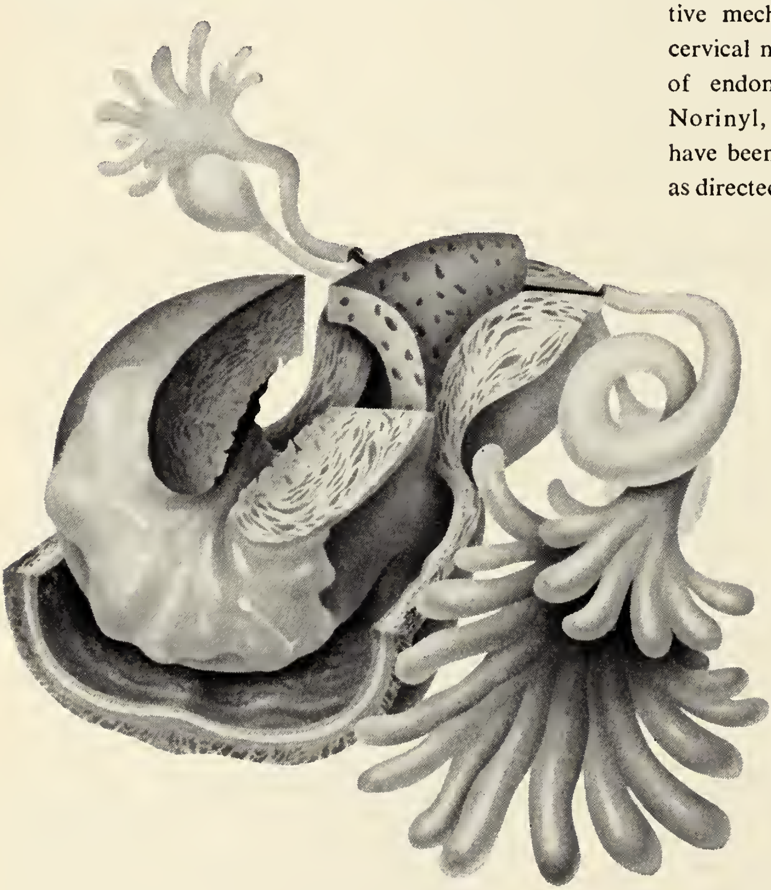
inhibition of ovulation by means of 2 time-proved hormonal agents

production of a cervical mucus hostile to sperm motility and vitality

creation of an endometrium unreceptive to egg implantation

no unplanned pregnancies

Norinyl provides multiple action for maximum assurance of success. It does not depend on ovulation inhibition alone for contraceptive effectiveness. The mechanism of action of combined hormonal therapy results in ovulation inhibition reinforced by other protective mechanisms, including a hostile cervical mucus[1-13] and an acceleration of endometrial changes.[1-3,7-16] With Norinyl, no unplanned pregnancies have been reported to date when used as directed.



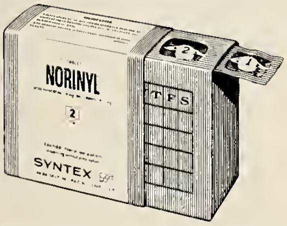
plus important supportive benefits that help her through those critical early months of oral contraception

low incidence of side effects

Low incidence of BTB and spotting, nausea and amenorrhea tends to minimize side effect problems and increases patient cooperation.

no confusion about dosage

An unbreakable "confusionproof" package makes it easy to adhere to prescribed dosage schedule: individually sealed tablets numbered from 1 through 20 *plus* monthly calendar record enables patient to double-check dosage intake by day and corresponding tablet number.



Contraindications: Thrombophlebitis or pulmonary embolism (current or past). Existing evidence does not support a causal relationship between use of Norinyl and development of thromboembolism. While a study which was conducted does not resolve definitively the possible etiologic relationship between progestational agents and intravascular clotting, it tends to confirm the findings of the Ad Hoc Advisory Committee appointed by the Food and Drug Administration to review this possibility. Cardiac, renal or hepatic dysfunction. Carcinoma of the breast or genital tract. Patients with a history of psychic depression should be carefully studied and the drug discontinued if depression recurs to marked degree. Patients with a history of cerebral vascular accident.

Warning: Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions, medication should be withdrawn.

Precautions: By May 1963, experience with norethindrone 2 mg.—mestranol 0.1 mg. had extended over 24 months. Through miscalculation, omission or error in taking the recommended dosage of Norinyl, pregnancy may result. If regular menses fail to appear and treatment schedule has not been adhered to, or if patient misses two menstrual periods, possibility of pregnancy should be resolved before resuming Norinyl. If pregnancy is established, Norinyl should be discontinued during period of gestation since virilization of the female fetus has been reported with oral use of progestational agents or estrogen. When lactation is desired, withhold Norinyl until nursing needs are established. Existing uterine fibroids may increase in size. In metabolic or endocrine disorders, careful clinical preevaluation is indicated. A few patients without evidence of hyperthyroidism had elevated serum protein-bound iodine levels, which in the light of present knowledge, does not necessarily imply hyperthyroidism. Protein-bound iodine increased following estrogen administration. Bromsulphalein retention has occurred in up to 25% of patients without evidence of hepatic dysfunction. Studies from 24-hour urine collections have shown an increase in aldosterone and 17-ketosteroids and decrease in 17-hydroxycorticoid levels. Thus, Norinyl should be discontinued prior to and during thyroid, liver or adrenal function tests. Because progestational agents may cause fluid retention, conditions such as epilepsy, migraine and asthma require careful observation. Thus far no deleterious effect on pituitary, ovarian or adrenal function has been noted; however, long-range possible effect on these and other organs must await more prolonged observation. Norinyl should be used with caution in patients with bone, renal or any disease involving calcium or phosphorus metabolism.

Side Effects: Intermenstrual bleeding; amenorrhea; symptoms resembling early pregnancy, such as nausea, breast engorgement or enlargement, chloasma and minor degree of fluid retention (if these should occur and patient has not strictly adhered to medication plan, she should be tested for pregnancy); weight gain; subjective complaints such as headache, dizziness, nervousness, irritability; in a few patients libido was increased. In a total of 3,090 patients, 2.2% discontinued medication because of nausea.

NOTE: See sections on contraindications and precautions for possible side effects on other organ systems.

Dosage and Administration: One Norinyl tablet orally for 20 days, commencing on day 5 through and including day 24 of the menstrual cycle. (Day 1 is the first day of menstrual bleeding.)

Availability: Dispensers of 20 and 60 tablets; bottles of 100.

References: **1.** Council on Drugs. JAMA 187:664 (Feb. 29) 1964. **2.** 8ryans, F. E.: Canad Med Ass J 92:287 (Feb. 6) 1965. **3.** Goldzieher, J. W.: Med Clin N Amer 48:529 (Mar.) 1964. **4.** Cohen, M. R.: Paper presented at Symposium on Low-Dosage Oral Contraception, Palo Alto, Calif., July 15, 1965. Reported in Med Sci 16:26 (Nov.) 1965. **S.** Hammond, D. O.: Ibid. **6.** Rice-Wray, E., Goldzieher, J. W., and Aranda-Rosell, A.: Fertil Steril 14:402 (Jul.-Aug.) 1963. **7.** Goldzieher, J. W., Moses, L. E., and Ellis, L. T.: JAMA 180:359 (May 5) 1962. **8.** Kempers, R. O.: GP 29:88 (Jan.) 1964. **9.** Tyler, E. T.: JAMA 187:562 (Feb. 22) 1964. **10.** Rudel, H. W., Martinez-Manautou, J., and Maqueo-Topete, M.: Fertil Steril 16:158 (Mar.-Apr.) 1965. **11.** Flowers, C. E., Jr.: N Carolina Med J 25:139 (Apr.) 1964. **12.** Goldzieher, J. W.: Appl Ther 6:5D3 (June) 1964. **13.** The Control of Fertility. Report adopted by the Committee on Human Reproduction of the American Medical Association. JAMA 194:462 (Oct. 25) 1965. **14.** Flowers, C. E., Jr.: JAMA 188:1115 (June 29) 1964. **1S.** Merritt, R. I.: Appl Ther 6:427 (May) 1964. **16.** Newland, D. O.: Paper presented at Symposium on Low-Dosage Oral Contraception, Palo Alto, Calif., July 15, 1965. Reported in Med Sci 16:26 (Nov.) 1965.

norethindrone—an original steroid from
SYNTEX
LABORATORIES INC., PALO ALTO, CALIF.

Norinyl® tablets
(norethindrone 2 mg. c̄ mestranol 0.1 mg.)

for multiple contraceptive action

Classified Ads

FOR RENT OR LEASE: Grand Rapids. Southeast. Large new fully equipped air conditioned office with going active General Practice available immediately. Beautiful home also available if desired. Try it for a year! Call 616-GL 2-6907.

PATHOLOGIST, family, certified anatomic and clinical pathology, seeks directorship of 1 or 2 community hospital laboratories (In same or near-by communities) having major specialty medical staff representation. Will consider association in comparable practice. Wish to provide reasonably complete laboratory service under equitable contract. Good public schools required. Reply Box 30, 120 West Saginaw Street, East Lansing, Michigan.

GENERAL PRACTITIONER, age 32 or under, U. S. trained, prior military service, for multi-specialty group practice near metropolitan area, lead to partnership. Reply Box 27, 120 West Saginaw Street, East Lansing, Michigan.

DEPUTY PUBLIC HEALTH DIRECTOR for well established County Health Department in Michigan. Physician with experience in pediatrics and/or obstetrics and public health preferred but not required. Duties include administration and coordination of public health programs for county with 400,000 population. Department has 30 employees. Salary $16,000-$18,000 depending on qualifications and experience. Michigan license or eligible. Full time, must be in good health. Full information first letter. Applicants should contact Douglas C. Burleigh, County Controller, Genesee County, Flint, Michigan 48502.

INTERNIST: Join ultramodern clinic with hospital, Detroit suburb. Challenging scientific environment. Salary open. Basic Science certificate required. Write Fairwood General Hospital, 4050 E. 12 Mile Road, Warren, Michigan 48092.

Aggressive GENERAL SURGEON to join dynamic multi-specialty group in suburban Detroit. Additional training in vascular, urological, or orthopedics makes you more desirable. Basic science certificate required for licensure in Michigan. Call 313-755-2500 or write Fairwood General Hospital, 4050 E. 12 Mile Road, Warren, Michigan 48092.

FOR LEASE by non-profit organization. Medical Clinic, room for two or three doctors and 1 dentist. Reply Waldo C. Proctor, Secretary, or Elmer Conrad, President. Dr. O. R. MacKenzie Clinic, P. O. Box 164, Walled Lake, Michigan.

ANESTHESIOLOGIST: To work with Board Certified Surgeon in busy modern hospital located suburb of Detroit. Salary or fee for service. Write Box 29, 120 W. Saginaw Street, East Lansing, Michigan.

FOR RENT: Office space, 7 rooms completely equipped for Ophthalmologist or Otolaryngologist. Write: W. C. Behen, M.D., 535 S. Capitol Avenue. Lansing, Michigan.

INTERNAL MEDICINE & SURGERY: (Charlevoix, Michigan) (Charlevoix County, area 2)—Community of 2700 with 60,000 drawing area, offers opportunity for specialist in internal medicine and surgery. Beautiful modern hospital of 52 beds, located on beautiful Lake Michigan; in industrial, and summer and winter resort area. A new doctor's office, designed for a four-man operation, is soon to be under construction, on the hospital grounds. Contact: Charlevoix Hospital Board of Trustees. Anne Baumgartner, Administrator, Charlevoix Hospital, Charlevoix, Michigan.

GENERAL PRACTITIONER urgently needed to join 2-man group. New office and new modern hospital. 2 hours from Detroit and a University Hospital. Financial arrangements completely open to discussion. Please phone collect, Malcolm K. Dolbee, M.D. Area code 517, VI 6-2801.

PHYSICIAN WANTED: Staff physician for 3000-bed facility for mental retardates in southern Michigan. Salary range $15,200 to $18,500. Housing available at minimal rate. Liberal leave allowances and other fringe benefits. Citizenship and eligibility for Michigan licensure required. Write Medical Superintendent, Box 148, Coldwater, Michigan.

PHYSICIAN: Small accredited hospital —ideal working conditions for physician seeking regular hours, moderate work load, good salary and association with chain. Please reply to Miss Atkins, 91 Glendale Avenue, Highland Park, Michigan. Phone 313-868-5232.

MODERN MEDICAL CLINIC for lease: one or more physicians in small progressive area of Whitehall and Montague. Numerous surrounding industrial plants, heavy patient demand, area at present in great need. 15 minutes to Muskegon or Shelby Hospital. Most agreeable on rent for someone just getting started. Brick Building with parking including 11 rooms (9 treatment), 100 MA X-ray, personal library, drug room with lab. BMR, EKG. Diathermy. Ultraviolet and Ultrasonic. Able to handle nearly all outpatient work. New bookkeeping machines. An exceptional opportunity, gross unlimited. Beautiful location on the shores of White Lake and the sandy beaches of Lake Michigan. Suburban atmosphere. Contact: Mrs. L. M. Papham, Box 56, Whitehall, Michigan. Phone evenings 893-3061.

EASTERN WISCONSIN CLINIC i rapidly growing community of 40,00 desires board-eligible or certified phy sicians in pediatrics, obstetrics an gynecology and internal medicine. Wel equipped clinic and excellent hospit facilities. Lake shore location offe ample recreational facilities. Attracti financial plan leading to early fu partnership. Full expenses paid f applicants invited to interview. Ca or write: F. L. Hildebrand, M.I Riverside Clinic, Menasha, Wisconsi

PSYCHIATRIC RESIDENCIES—Pos tions available January and July 196 Fully approved; balanced didactic an clinical program. Three programs fro which to choose; Three-Year Progran $8,352 to $9,500; Five-Year Care Program, $9,500 to $17,184; N. I. M H. General Practitioner stipend $12,000. Located in Michigan's Wat Winter Wonderland. Contact Dr. Pa Kauffman, Director of Training, Tr verse City State Hospital, Traver City, Michigan. An equal opportuni employer.

FOR RENT: Doctors eleven-room clin in Mason, 12 miles from Lansing. H been occupied by doctors for over 2 years. Wonderful opportunity for pr fessional man to establish a futur Shortage of medical services in th charming and thriving community wit many churches and good schools. Co tact: Delmar Kramer, Dart Nation Bank, Mason, Michigan, ORchard 3661, evenings ORchard 6-5586.

INTERNIST, age 35 or under, U. trained, prior military service, for mu ti-specialty group practice near metr politan area, lead to partnership. Rep Box 26, 120 W. Saginaw Street, Ea Lansing, Michigan.

PHYSICIAN: General practice with si man hard-working group in suburba Detroit. Delicious salary and futu percentage. Write: Fairwood Gener Hospital, 4050 E. 12 Mile Road, Wa ren, Michigan.

PSYCHIATRIST—Clinical Director f outpatient clinic being established a for 100-bed inpatient service, new constructed private psychiatric facilit Attractive starting salary and intere ing opportunity for program develo ment. Will consider sharing of duti by two associates. Write or phon Administrator, Kingswood Hospit 10300 W. Eight Mile Road, Fernda Michigan 48220 (313-398-3200)

DUCK HUNTERS ATTENTION: my guide service I provide deco blinds. and the world's best layo boats. I have several blinds all rea to be placed in the heart of the T and Mallard nesting grounds on Nort west Saginaw Bay. If intereste please write for my FREE 1966 p tured brochure. John Pestrue, Sta dish, Michigan.

PROFESSIONAL MANAGEMENT
since 1932
PM®
FOR PHYSICIANS AND DENTISTS

Professional Management

BLACK AND SKAGGS ASSOCIATES
Battle Creek, Michigan
Affiliated Offices
Battle Creek - - - Detroit
Grand Rapids - - - Saginaw
Traverse City - - - Berkley

"SERVING THE MICHIGAN PHYSICIANS FOR OVER 30 YEARS"

THESE ADVERTISERS HELP MAKE MICHIGAN MEDICINE POSSIBLE

bott ... 689, 690, 691, 692
es Co., Inc. ... Cover III
erst Laboratories ... 749, 750, 751, 752, 753

ghton Hospital ... 759
roughs Wellcome & Co. ... 694

a Pharmaceutical Co. ... 732, 733
ssified Advertising ... 788
ca-Cola ... 758

sey Laboratories ... 701, 702, 703, 704
Chemical Co. ... 693

gy Pharmaceuticals ... 695, 711

vlett Packard Co., Sanborn Division ... 778
son, Westcott & Dunning, Inc. ... 681

am Co., G. A. ... 706, 772
nd Steel Co. ... 768

ney Foundation ... 697
swood Hospital ... 762

side Laboratories ... 757
erle Laboratories ... 736, 737, 755, 775, 784
, Eli and Co. ... 712

Medical Arts Supply ... 746
Medical Protective ... 785
Merck, Sharp & Dohme ... 708, 709
Mercywood Hospital ... 774

Parke, Davis & Co. ... Cover II
Philips Roxane Laboratories ... 760, 761
Pitman-Moore Division, Dow Chemical Co. ... 698, 699
Plainwell Sanitarium ... 789
Professional Management ... 789

Robins Co., Inc., A. H. ... 781, 782
Roche Laboratories ... Cover IV

Sammond Pleasant Lodge ... 688
Sanborn Division, Hewlett Packard Co. ... 778
Searle, G. D. & Co. ... 734, 735
Smith Kline & French Laboratories ... 771
Stratton, Ben P. ... 744
Squibb ... 743, 763
Syntex Laboratories ... 686, 687, 786, 787

Tutag, S. J. & Co. ... 747

University of Michigan ... 766, 767

Wallace Laboratories ... 684, 707
Winthrop Laboratories ... 682, 769

PLAINWELL SANITARIUM, INC.

Plainwell, Michigan—MU 5-8441

Edwin M. Williamson, M.D.
M. Leroy Barry, M.D.

Dan W. Everett, M.D.
Wilbur R. King, Ph.D.

The Plainwell Sanitarium is a private psychiatric hospital licensed by the Michigan Department of Mental Health, and member of the American Hospital Association, Michigan Hospital Association, and National Association of Private Psychiatric Hospitals. Our extensive diagnostic treatment services include the following:

- Organic and psychological therapy for the psychiatrically and emotionally disturbed of all ages.
- Diagnostic evaluation of neurological disorders.
- Rehabilitative services for geriatric and convalescent patients.
- Medico-Legal counsel.
- Diagnostic and psychological evaluation and hospitalization, if indicated, of juveniles for Probate and Juvenile Courts.

PRESIDENT'S PAGE

Three Closing Thoughts . . .

We all hear many statistics every day. This month I'd like to mention three and develop them into several thoughts of interest to all of you doctors . . .

Statistic #1—The average physician works 58 hours per week in the United States.

This doesn't leave many hours for the continuous challenge of keeping abreast of new findings in therapy and research. How many additional hours do you spend each week listening to postgraduate speakers, reading Michigan Medicine and all the other fine scientific journals, etc.? My recommendation to help you augment your fund of knowledge and understanding is to participate in the MSMS 101st Annual Scientific Session in Grand Rapids, September 27-28-29-30. An excellent program has been arranged to help every doctor in his daily practice.

Statistic #2—If you are 29 and have 36 working years left, all you earn in 10 of them will go for taxes.

There's a startling fact. It is easy to move from this statistic into some comments about the role of the physician as a taxpayer. As taxpayers, it is our responsibility and obligation to evaluate the services provided by the school system, and by the city, township, county, state and federal governments. We should participate in community affairs and share in decisions to obtain the best services possible from each of the governmental units. How would you grade yourself on the role you play as an enlightened, interested taxpayer?

Statistic #3—In the last election for governor in Michigan, 61 per cent of those registered to vote marked their ballots.

The weeks are going by quickly as we approach the 1966 November election. Many doctors are helping the candidates of their choice, others are participating in town hall meetings so the electors can hear the candidates, and still others are alerting some of their patients to apply for absentee ballots. Many American leaders are concerned about the relatively low percentage of Americans who vote compared to some of the European countries. There are many opportunities each day for physicians and their families to be more active in political affairs and to be more concerned about good government. When your office girl begins to fill in your appointment schedule for Tuesday, November 8, be sure she blocks out time for you to cast your ballot for Governor, for Senator, for United States Representative, and for the many State and County candidates.

In closing this last President's Page for the year, I want to tha you for this chance to visit with you each month. It's been a speci challenge to be the 100th President of the Michigan State Medic Society and I want to express my deep appreciation to the other MSM officers and members of The Council, to the chairmen and the ma members of MSMS committees, to the county society officers and th members, and to the MSMS staff for their support and encourageme

Luther R. Leader, M.D

new from Ames 5 basic uro-analytical facts in 30 seconds

Labstix®

BRAND REAGENT STRIPS

...broadest urine screening possible from a single reagent strip

Urine test results with LABSTIX Reagent Strips can represent significant guides to differential diagnosis or therapy in many conditions. An unexpected "positive" may enable you to detect hidden pathology—long before more recognizable symptoms become evident. Negative results, which permit you to rule out abnormalities in a broad clinical range, can serve as baseline values for reference in future examinations. The 5 colorimetric test areas encompassed on LABSTIX Reagent Strips are:

pH—values are read numerically in the essential range of pH 5 to pH 9.

Protein—results are read either in the "plus" system or in mg. % in amounts approximating "trace," 30, 100, 300, and over 1000 mg. %.

Glucose—provides a "Yes-or-No" answer for urine "sugar spill."

Ketones—detects ketone bodies in urine—**both** acetoacetic acid and acetone. Reacts with as little as 5 to 10 mg. % of acetoacetic acid.

Occult Blood—specific test for intact red cells, hemoglobin or myoglobin. Results are read as negative, small, moderate or large amounts.

Now a Clear Reagent Strip of Firm Construction

...facilitates handling during testing procedure. Excellent color contrast made possible by the clear plastic strip, together with the clearly defined color charts provided, permits precise, reproducible colorimetric readings in all 5 test areas. A more definitive interpretation of uro-analytical facts is made possible.

Available: LABSTIX Reagent Strips, bottles of 100 (color charts are supplied with each bottle).

Ames Company, Inc., Elkhart, Indiana

AMES

08165

when anxiety is part of the clinical picture

Librium®
(chlordiazepoxide HCl)

Before prescribing, please consult complete product information, a summary of which follows:

Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Warn against hazardous occupations requiring complete mental alertness. Use caution in administering to addiction-prone patients or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.

Precautions: In elderly and debilitated and in children over five, limit dosage to smallest effective amount, increasing gradually as needed and tolerated. In general, concomitant use with other psychotropics is not recommended. Paradoxical reactions have been reported in psychiatric patients and hyperactive aggressive children. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically. Observe usual precautions in presence of impaired renal or hepatic function, impending depression and suicidal tendencies.

Adverse reactions: Drowsiness, ataxia and confusion may occur, especially in elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. Syncope occurs rarely. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis, jaundice and hepatic dysfunction) may develop occasionally, making periodic blood counts and liver-function tests advisable during protracted therapy. Individual maintenance dosages should be determined.

Dosage: *Oral*—Adults: Mild to moderate anxiety and tension, 5 or 10 mg t.i.d. or q.i.d.; severe states, 20 or 25 mg t.i.d. or q.i.d. Geriatric patients: 5 mg b.i.d. to q.i.d.

Supplied: Capsules, 5 mg, 10 mg and 25 mg—bottles of 50.

ROCHE

Roche Laboratories • Division of Hoffmann-La Roche Inc • Nutley, N.J. 07110

Michigan Physicians Step Up VD Education to Help Reduce Toll of Dreaded Diseases.

OCTOBER, 1966 — PUBLISHED MONTHLY

MICHIGAN MEDICINE

MICHIGAN STATE MEDICAL SOCIETY

U.C. MEDICAL CENTER LIBRARY
NOV 3 1966
San Francisco 94122

some allergens are red...
whatever their color, shape, or size...
Benadryl®
(diphenhydramine hydrochloride)
PARKE-DAVIS
for control of allergic symptoms

Whether the allergen is red and round, or unseen and unknown, BENADRYL provides relief of symptomatic distress through its antihistaminic and antispasmodic actions. *PRECAUTIONS:* Persons who have become drowsy on this or other antihistamine-containing drugs, or whose tolerance is not known, should not drive vehicles or engage in other activities requiring keen response while using this product. Hypnotics, sedatives, or tranquilizers if used with BENADRYL should be prescribed with caution because of possible additive effect. Diphenhydramine has an atropine-like action which should be considered when prescribing BENADRYL. *SIDE EFFECTS:* Side reactions, commonly associated with antihistaminic therapy and generally mild, may affect the nervous, gastrointestinal, and cardiovascular systems. Most frequent reactions are drowsiness, dizziness, dryness of the mouth, nausea, and nervousness. BENADRYL is available in Kapseals® of 50 mg. and Capsules of 25 mg. 00666

PARKE-DAVIS

PARKE, DAVIS & COMPANY, Detroit, Michigan 48232

1866 1966 100th ANNIVERSARY

Lutrexin®

HW&D BRAND OF LUTUTRIN

3000 UNIT TABLETS

IN THE TREATMENT OF FUNCTIONAL DYSMENORRHEA
ND SELECTED CASES OF PREMATURE LABOR AND 2ND
AND 3RD TRIMESTER THREATENED ABORTION

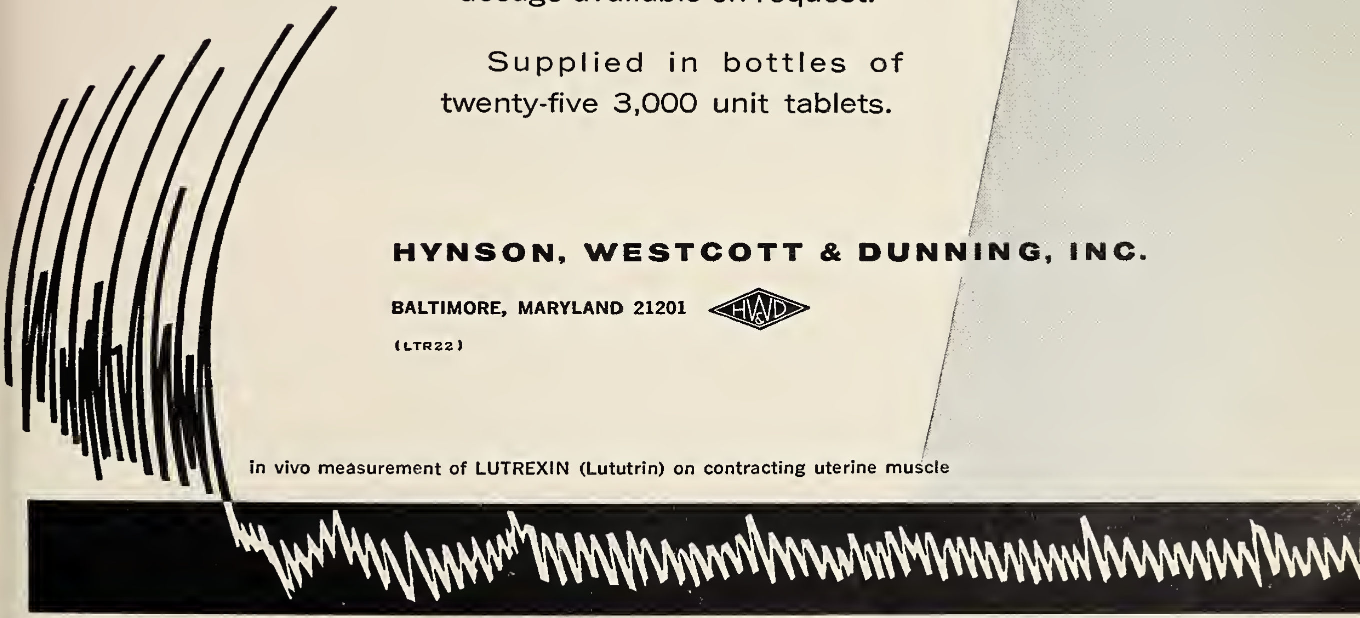
In controlling abnormal uterine activity, LUTREXIN, the non-steroid "uterine relaxing factor" has been found to be the drug of choice by many clinicians.

No side effects have been reported, even when massive doses (25 tablets per day) were administered.

Literature on indications and dosage available on request.

Supplied in bottles of twenty-five 3,000 unit tablets.

HYNSON, WESTCOTT & DUNNING, INC.
BALTIMORE, MARYLAND 21201 HW&D
(LTR22)



in vivo measurement of LUTREXIN (Lututrin) on contracting uterine muscle

When the stagnant sinus must be drained...

Transillumination of the sinuses—diffuse shadow on right side of face indicates unilateral maxillary sinusitis.

In the common cold, Neo-Synephrine is unsurpassed for reducing nasal turgescence. It stops the stuffy feeling at once. It opens sinus ostia to re-establish drainage and lessen the chance of sinusitis. With Neo-Synephrine, in the concentrations most commonly used, decongestion lasts long enough for extended breathing comfort, without endangering delicate respiratory tissue. Systemic side effects are virtually unknown. There is little rebound tendency.

Winthrop Laboratories, New York, N.Y. 10016 Winthrop

Neo-Synephrine® HCl

Brand of phenylephrine hydrochloride

is available in a variety of forms, for all ages:

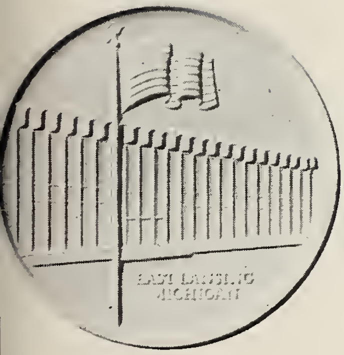
⅛% solution for infants
¼% solution for children and adults
¼% pediatric nasal spray for children
½% solution for adults
½% nasal spray for adults
½% jelly for children and adults
1% solution for adults (resistant cases)

Also NTZ® Solution or Spray
Antihistamine-decongestant

(1025

OCTOBER, 1966
VOLUME 65, NUMBER 10
PUBLISHED MONTHLY BY MICHIGAN STATE MEDICAL SOCIETY

MICHIGAN MEDICINE



BLICATION COMMITTEE
ADLEY M. HARRIS, M.D., Ypsilanti
Chairman
C. HANSEN, M.D., Battle Creek
L. MASTERS, M.D., Fremont
W. MCLEAN, M.D., Detroit
H. RODDA, M.D., Bay City
J. TALLANT, M.D., Detroit
LTON R. WEED, M.D., Grosse Pte. Park

entific Editor
ORGE H. LOWREY, M.D.

naging Editor
RBERT A. AUER

MS Executive Director and
siness Manager
GH W. BRENNEMAN

cover sketch was provided to
MS by the AMA. It is also being
d in an AMA-designed adver-
ment that county medical so-
ies may obtain for their local
spapers with the copy that
ns: "Don't Gamble with V.D."
ies of the advertisement mat
be obtained from MSMS, 120
t Saginaw, East Lansing.

ORIGINAL ARTICLES

817 MEDICINE AS A SOCIAL INSTITUTION/LESTER J. EVANS, M.D.
820 PEDIATRIC DIAGNOSTIC METHODS IN ADULT UROLOGY/ARTHUR J. JOHNSON, M.D., JAMES R. LEACH, M.D.
829 UTERINE RUPTURE IN LABOR FOLLOWING REPAIR FOR CERVICAL INCOMPETENCE/S. LEONARD COHN, M.D., WILLIAM S. FLOYD, M.D.
831 HEPATOMEGALY WITH PROGRESSIVE LIVER FAILURE IN AFGHANISTAN/ROBERT G. AXELROD, M.D., MILDRED A. AXELROD, M.D., ALI AHMAD HASHIMI, M.D., MOHAMMAD OMAR WARDOCK, M.D.
837 CONTROL OF INFECTIOUS SYPHILIS IN DETROIT/BENJAMIN SCHWIMMER, M.D.
838 TRANSTHORACIC VAGOTOMY FOR RECURRENT PEPTIC ULCERS/FRANKLIN R. JACKSON, M.D., ERNEST M. BERKAS, M.D., PH.D.
844 THE ORIGINS OF THE GREAT AMERICAN SOCIETY/C. T. HARDWICK, PH.D.
858 LIFE PLANNING SHOULD BEGIN EARLY/W. FRED MANGAN
868 MSMS HEALTHMOBILE "SELLS" CAREERS/HELEN LILLIE
STATE SOCIETY 803, 805, 806
TITLE XIX RULES 849, 850, 851, 852
BREAKING NEWS 847, 848, 853, 854
VIEWPOINTS 855
GOVERNMENTAL PROGRAMS 900, 906, 908
ANCILLARY MEETINGS 893, 894, 896
PUBLIC RELATIONS 880, 884, 885
LEGISLATIVE 798
PERSONAL MENTION 912

ALSO:

888 IN MEMORIAM
856 READERS WRITE
865 WELCOME NEW MEMBERS
795 PRESIDENT'S PAGE

Published monthly, except two extra issues to be published in November and January, by the Michigan State Medi-
Society as its official journal. Second class postage paid at Lansing, Michigan. Yearly subscription rate, $9.00; single
es, 80 cents. Additional postage: Canada, $1.00 per year; Pan-American Union, $2.50 per year; Foreign, $2.50 per
. Printed in USA. All communications relative to manuscripts, advertising, news, exchanges, etc., should be addressed
Publications Committee, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48824.
1966 Michigan State Medical Society. Phone: Area Code 517, 337-1351.

Equip your ICU with the exact monitoring capabilities you need

You can have a system "tailored" to your needs — *using standard HP Sanborn monitoring modules* — whether it involves a few conditions for a few patients . . . or many patient conditions, eight or more beds, and complete central station alarm/display/recording facilities. Start with 780-series modules for monitoring the ECG and heart rate, for example (shown above), and as needs and budget enlarge, add "780" modules to monitor more functions, more patients or both. (Illustration below shows the addition of temperature, respiration rate, systolic and diastolic pressure monitoring functions, plus pacemaker, to the original two functions.) System suitability, economy, future functional and location adaptability, and rapid staff training are the continuing benefits of modular "780" systems.

Specific capabilities of these units, in addition to those mentioned, include venous pressure monitoring . . . internal/external DC defibrillation . . . and continuous ECG recording on endless loop magnetic tape units, with automatic readout on alarm of data immediately preceding distress condition. Wall Mount Brackets are available to free space around beds, or two styles of "780" carts give complete instrumentation mobility. For Central Station use, a wide choice of units is available for visual display, audible alarm, signal switching, graphic and tape recording.

When complete cardiac function monitoring is needed, with automatic ECG recording at selected intervals or on distress, the 780B Viso-Monitor provides it in a single bedside unit. Indicators display heart rate, QRS event, bradycardia, tachycardia, pulse loss and arrest; internal/external pacemaker is built in. Companion unit supplies visual display and audible alarm of all conditions monitored by the Viso-Monitor.

HP/Sanborn field offices can give you valuable help in system planning, installation and staff training — and provide continuing, local service. For details, send the coupon to Hewlett-Packard Company, Sanborn Division, Waltham, Mass. 02154. In Europe, H.P.S.A., 54 Route des Acacias, Geneva.

HEWLETT PACKARD *SANBORN DIVISION*

Measuring for Medicine and the Life Sciences

0-740

Send detailed data on Sanborn 780 Series Patient Monitoring Systems to:

(name) (hospital)

(address)

(city) (state) (zip code)

ONTHLY MESSAGE FROM MSMS PRESIDENT

Medicine's Challenges Today

The beginning of the second century of activity f the Michigan State Medical Society is a propi-ious moment for us to re-study the objectives of ur organization and re-evaluate problems that onfront us now, and in succeeding years. Recent ociological, political, and scientific trends in our ation give considerable urgency to a review of the hallenges that face us now, and during the next ecade.

My activities as President-Elect have afforded pportunities to visit with medical leaders through-ut the United States. As a result of these meet-ngs, I have tried to re-evaluate, categorize, and ssign priority to the important challenges facing rganized medicine, both in Michigan, and hroughout the nation. I consider the following ight items of greatest importance, and top prior-ty.

. The solution to the shortage of medical man-ower, both physicians and auxiliary personnel ust receive our immediate attention with bold ew approaches. Some activity has, and is occur-ing in this area, but we must re-double our ef-orts at once.

. We must re-study and if necessary, re-design nd streamline our programs of continuing educa-ion for physicians to make them more effective. his becomes of paramount importance in view of e increasing patient load of the average prac-cing physician.

. A most critical area of communication is be-ween the physician and his patient. Evidence is ccumulating that the individual physician is not atisfying the wants of many of his patients. This the area where the "image of medicine" is made, r destroyed. It is the responsibility of the Michi-an State Medical Society to encourage and assist physicians in assuming even greater obligation to communicate effectively with each patient to the end that each is satisfied.

MSMS President

C. Allen Payne, M.D.

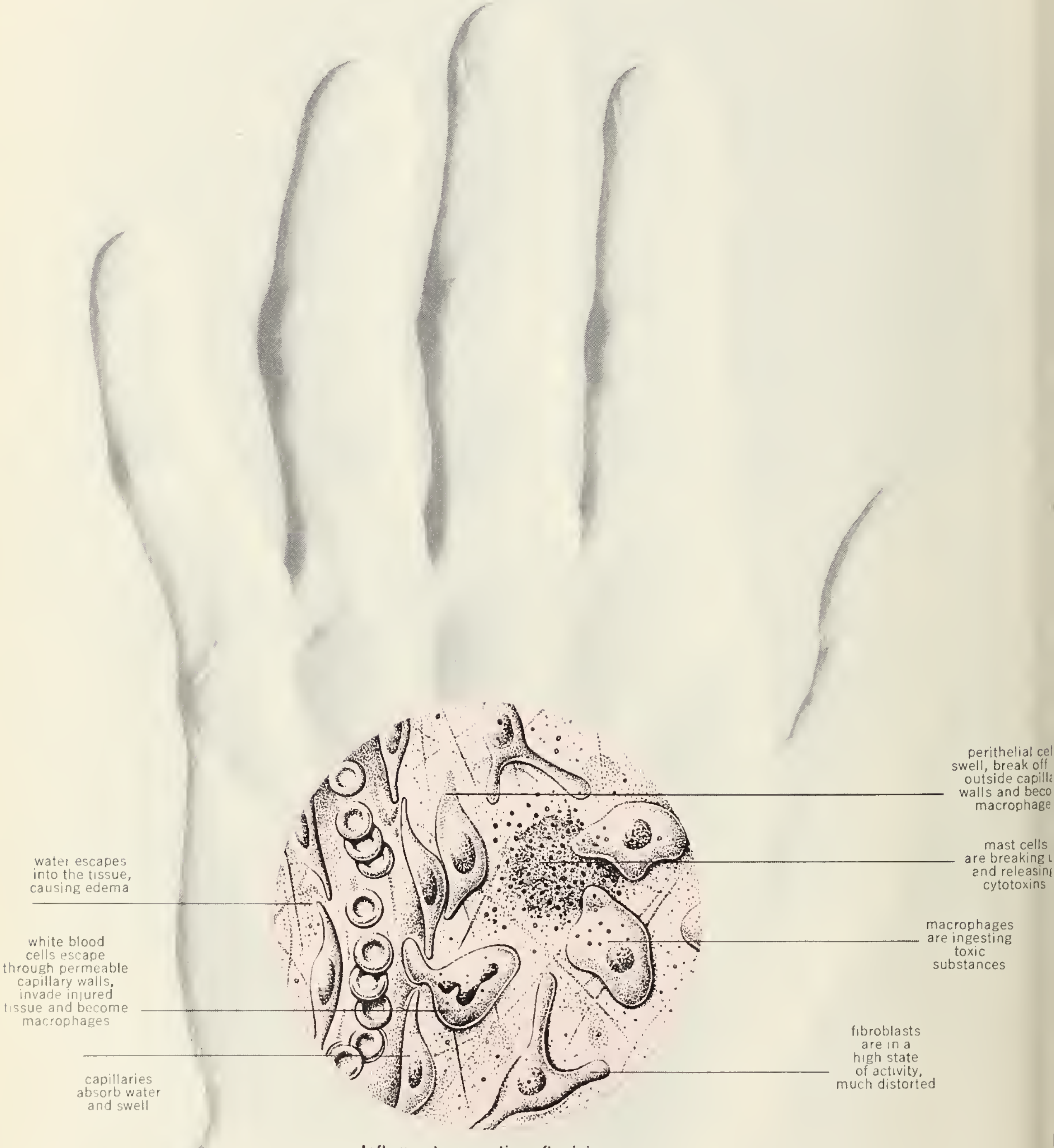
4. Recent sociological and political events have resulted in the passage of Public laws 89-97 (Medicare) and 89-239 (Health, Cancer and Stroke). This legislation when completely implemented, will be a major factor in changing present patterns of medical practice and, we believe, will tend to produce a decrease in the quality of medical care. Already the Congress, and the Executive Office of the Federal Government are seriously considering modifications and rather expansive extensions of this type of legislation. On the state level, legislative and related problems must have our attention during the next several years. Amalgamation with osteopathy and updating or rewriting the medical practice act are two items of immediate importance. In order to successfully combat state and national legislation which will degrade the quality of medical care, and in order to further improve medical care through legislative means, we must form a more effective knowledgeable team among the individual physician, his county medical society, and MSMS. I have seen this work, and I know that it can be improved.

5. We need to re-examine the pattern of medical organizations at the national, state and local levels to the end that they can be effectively strengthened, and thus be prepared to handle the tough challenges that confront us now, and in the future. An important aspect of this problem is more meaningful communication between the medical organization, and the individual physician, and visa versa. We must develop better representation and cooperation among all branches of medical practice, so that your state organization can speak and act for medicine as a unit.

6. Modern medical care is expensive, due to the great technologic advances, expensive equipment, the employment of more skilled and highly trained personnel, the costs of developing more effective drugs, and the increasing operational expenses of hospitals and other facilities. The individual physician and organized medicine has an obligation to avoid waste of financial resources, always be-

(Continued on Page 798)

Cinemicrography* of living tissue shows that Synalar works at the cellular level to stop the inflammatory chain reaction


perithelial cel
swell, break off
outside capilla
walls and beco
macrophage
mast cells
are breaking
and releasin
cytotoxins
water escapes into the tissue, causing edema
macrophages are ingesting toxic substances
white blood cells escape through permeable capillary walls, invade injured tissue and become macrophages
fibroblasts are in a high state of activity, much distorted
capillaries absorb water and swell

Inflammatory reaction after injury

*A New View of Corticosteriod Action in Inflammatory Dermatoses
A 16 mm. film utilizing time-phase cinemicrographic techniques. Available for showing on request to Syntex Laboratories.

In contact dermatitis

Synalar®

(fluocinolone acetonide)

stabilizes cell and capillary walls
protects against the chemical impact of cytotoxins

interrupts the chain reaction of destructive changes at the cellular level

permits inactivation, absorption and transportation of toxins away from the injured area by natural processes...edema is absorbed and cells return to normal size, shape, and activity

In inflammatory dermatoses choose a steroid synthesized specifically for topical use. Synalar (fluocinolone acetonide) provides therapeutic results often comparable to those of systemic and intralesional corticosteroids with fewer hazards.[1-3]

when complicated by infection

neo-synalar®

(fluocinolone acetonide-neomycin sulfate cream)

For initiation of therapy: Cream 0.025%, 5 and 15 Gm. tubes, 425 Gm. jars; **for emollient effect:** Ointment 0.025%, 15 Gm. tubes; **for maintenance therapy:** Cream 0.01%, 15 Gm. tubes, 45 Gm. tubes, 120 Gm. jars; **for intertriginous or hairy sites:** Solution 0.01%, 20 cc. and 60 cc. plastic squeeze bottles; **for infected inflammatory dermatoses:** Neo-Synalar® Cream (0.025% fluocinolone acetonide, neomycin sulfate, equivalent to 0.35% neomycin base), 5 and 15 Gm. tubes.
Contraindications: Tuberculous, fungal, and most viral lesions of the skin, (including herpes simplex, vaccinia, and varicella). Not for ophthalmic use. Contraindicated in individuals with a history of hypersensitivity to any of its components. **Precautions:** Synalar preparations are virtually nonsensitizing and nonirritating. However, the solution may produce burning or stinging when applied to denuded or fissured areas. In some patients with dry lesions, the solution may increase dryness, scaling or itching. The neomycin in Neo-Synalar Cream rarely produces allergic reactions. Prolonged use of any antibiotic may result in overgrowth of nonsusceptible organisms; if this occurs, appropriate therapy should be instituted. Where severe local infection or systemic infection exists, the use of systemic antibiotics should be considered, based on susceptibility testing. While topical steroids have not been reported to have an adverse effect on pregnancy, the safety of their use on pregnant females has not absolutely been established. Therefore, they should not be used extensively on pregnant patients, in large amounts, or for prolonged periods of time. **Side Effects:** Side effects are not ordinarily encountered with topically applied corticosteroids. As with all drugs, however, a few patients may react unfavorably to Synalar under certain conditions.

References: 1. Kanee, B.: Canad Med Ass J 88:999 (May 18) 1963. 2. Scholtz, J. R.: Calif Med 95:224 (Oct.) 1961. 3. Jansen, G. T., Dillaha, C. J., and Honeycutt, W. M.: Arch Derm 92:283 (Sept.) 1965.

fluocinolone acetonide—an original steroid from
SYNTEX
LABORATORIES INC., PALO ALTO, CALIF.

PRESIDENT'S MESSAGE/Continued

having in the prudent economic interest of the patient commensurate with quality care. **Medicine is not practiced in an economic vacuum.**

7. Improved communications between organized medicine, individual physicians and the public are also badly needed. The demand for health information is insatiable. It is our duty to translate sound information into newsworthy articles, speeches, and press conferences that can compete successfully with slanted stories and other quackery technics which currently command wide attention. Such improved communications can also be an important factor in deciding the present great debate regarding the wise use of public funds in medical education, research and patient care.

8. There is considerable need for clarification of our professional ethics. Recent activities of the Department of Justice and events surrounding certain AMA resolutions have raised questions concerning the inter-relationships of the Sherman Act, economic motivation, and ethical and moral principles.

It is my sincere hope and my pledge that by working cooperatively with the other officers and The Council of the Society, and with the aid of the entire membership, we can move forward in a constructive manner to the end that an adequate quantity and quality of medical care will remain available for all of the people of Michigan.

Change is inevitable. If the Michigan State Medical Society, and the physicians of Michigan are to maintain and provide improved leadership in the health field, everyone of us must become more intimately involved in the challenges which I have presented and exert every reasonable effort to effect their solution. I, and the other officers and members of The Council, welcome any suggestions that may lead to the solution of any of these problems.

C Allen Payne MD

SURVEY EPILEPSY SERVICES

An intensive national survey to determine what facilities are available for diagnosis and treatment of epilepsy is now being conducted by The Epilepsy Foundation, in cooperation with the Surgeon General's recently appointed Advisory Committee on the Epilepsies. The study will provide a comprehensive listing of all medical centers and detailed information about related services, hours, charges and other facts which will enable a person with epilepsy to choose a facility which best meets his needs.

Stresses Importance Of Legislative Action

(The following is excerpted from the "Legislative Handbook for Association," available for $1.00 from the Association Service Department, Chamber of Commerce of the United States, 1615 H. Street, N.W., Washington, D.C.)

"Legislative action in Congress is not the primary function or purpose of most associations, nevertheless it is often an important part of an association's program. Now more than ever, legislation is having an increasing influence in industrial, professional and personal life.

"It has therefore become the responsibility of an association to keep abreast of legislative matters, to keep its membership informed, and often to take aggressive action. In order to do this effectively, an association must adhere to sound basic principles.

"If an association carefully researches, plans, and prepares its program, keeping in mind its limitations and its objectives, it can develop effective and successful legislative activities which will contribute to the strengthening of our economy and the preservation of our free enterprise system."

HACK SHOE CO.

50 years
of
Service to the Profession

1916 — 1966

DOWNTOWN DETROIT
33 East Adams

NORTH END
19360 Livernois Ave.

EAST DETROIT
20901 Kelly Road
(1 ½ blocks N. of 8 Mile)

BIRMINGHAM
235 Pirce St.

Doctor,

Here is the Abbott anorectic
program designed to meet
he individual needs of your
overweight patients.

ABBOTT

Abbott
Anorectic
Program

mood elevation

DESOXYN® Gradumet® (methamphetamine hydrochloride)

Smooth appetite control plus mood elevation.

The obese patient on a diet often has to battle depression as well as overweight. Desoxyn Gradumet helps the dieter in both battles by elevating the mood while it curbs the appetite. Thanks to the Gradumet, medication is smoothly released all-day from a single oral dose.

If she can't take plain amphetamine, put her on DESBUTAL® Gradumet

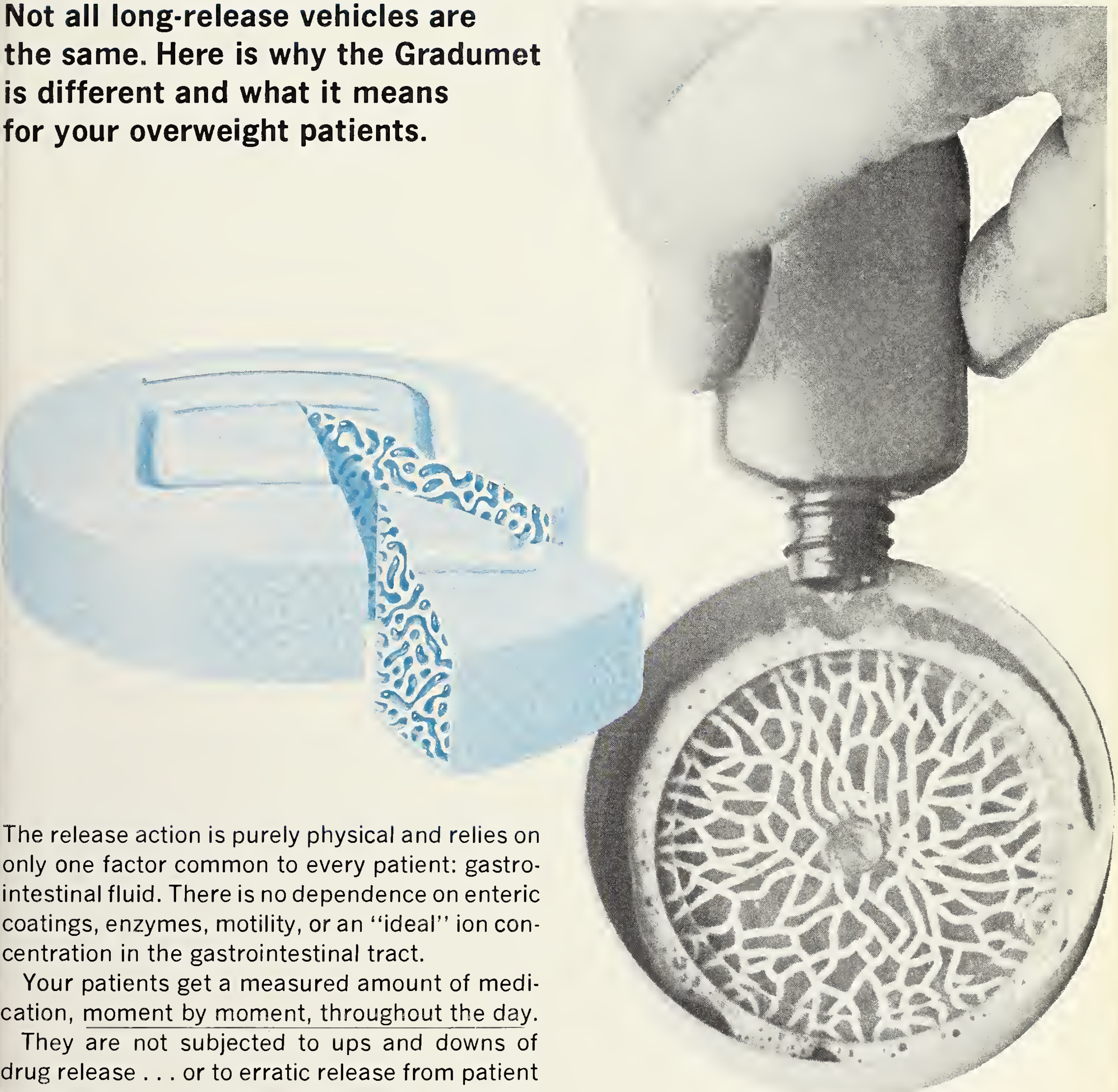
Calms anxieties; controls compulsive eating.

Desbutal Gradumet provides 2 drugs in 2 tablet sections, combined back to back to form a single tablet. One section contains Desoxyn to curb the appetite and lift the mood; the other contains Nembutal® (pentobarbital) to calm the patient and counteract any excessive stimulation.

Both drugs are released in an effective dosage ratio throughout the day.

controlled release

Not all long-release vehicles are the same. Here is why the Gradumet is different and what it means for your overweight patients.



The release action is purely physical and relies on only one factor common to every patient: gastrointestinal fluid. There is no dependence on enteric coatings, enzymes, motility, or an "ideal" ion concentration in the gastrointestinal tract.

Your patients get a measured amount of medication, moment by moment, throughout the day.

They are not subjected to ups and downs of drug release . . . or to erratic release from patient to patient . . . or to erratic release in the same patient from day to day.

That's why the Gradumet provides controlled-release as well as long release.

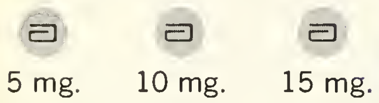
Perhaps you saw the Gradumet model demonstration which shows that the release is entirely physical. When fluid is added, the drug in the outer ends of the channels dissolves. As fluid penetrates deeper into the channels, there is a continuous release of medication. The rate of release is rigidly controlled by the size and number of channels.

choice of 5 strengths

Abbott
Anorectic
Program

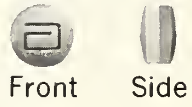
DESOXYN Gradumet

Methamphetamine Hydrochloride in Long-Release Dose Form



DESBUTAL 10 Gradumet

10 mg. Methamphetamine Hydrochloride,
60 mg. Pentobarbital Sodium

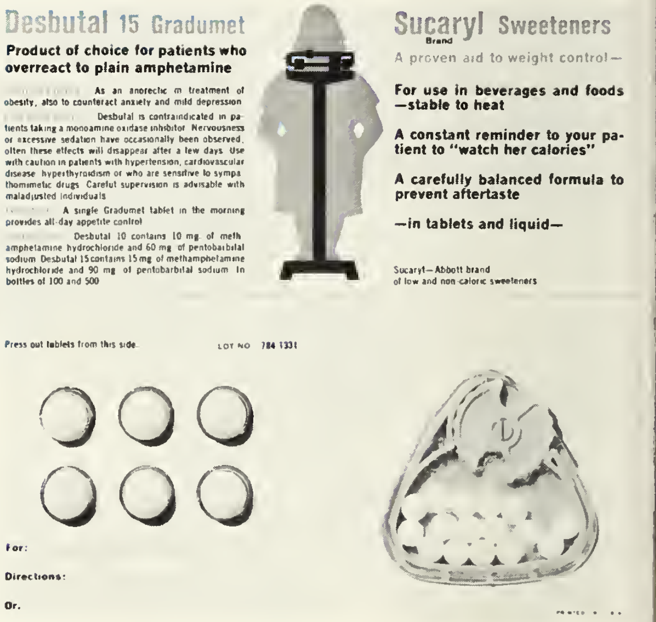


DESBUTAL 15 Gradumet

15 mg. Methamphetamine Hydrochloride,
90 mg. Pentobarbital Sodium

samples available

Each sample contains 6 tablets and a filled Sucaryl® Sweetener dispenser. For a supply, write Abbott Laboratories or ask your Abbott man.



Desbutal 15 Gradumet

Product of choice for patients who overreact to plain amphetamine

As an anorectic in treatment of obesity, also to counteract anxiety and mild depression

Desbutal is contraindicated in patients taking a monoamine oxidase inhibitor. Nervousness or excessive sedation have occasionally been observed, often these effects will disappear after a few days. Use with caution in patients with hypertension, cardiovascular disease, hyperthyroidism or who are sensitive to sympathomimetic drugs. Careful supervision is advisable with maladjusted individuals.

A single Gradumet tablet in the morning provides all-day appetite control

Desbutal 10 contains 10 mg. of methamphetamine hydrochloride and 60 mg. of pentobarbital sodium. Desbutal 15 contains 15 mg of methamphetamine hydrochloride and 90 mg. of pentobarbital sodium. In bottles of 100 and 500

Sucaryl Brand Sweeteners

A proven aid to weight control—

For use in beverages and foods —stable to heat

A constant reminder to your patient to "watch her calories"

A carefully balanced formula to prevent aftertaste

—in tablets and liquid—

Sucaryl—Abbott brand of low and non-caloric sweeteners

Press out tablets from this side.

LOT NO 784 1331

For:

Directions:

Dr.

economy

Patients, in many cases, save enough to get five weeks of medication for the price of four, compared to other leading long-release anorectics.

CONTRAINDICATION: Desoxyn and Desbutal are contraindicated in patients taking a monoamine oxidase inhibitor.

PRECAUTIONS: Use with caution in patients with hypertension, cardiovascular disease, hyperthyroidism, old age, or those sensitive to sympathomimetic drugs or ephedrine and its derivatives. Careful supervision is advisable with maladjusted individuals.

ABBOTT

Gradumet—long-release dose form, Abbott: U.S. Pat. No. 2,987,445.
Sucaryl—Abbott brand of low and non-caloric sweeteners.

601060

MSMS Offers Clinic Programs, ectures in 19 Communities

Nineteen post-graduate courses are being offered ross Michigan this fall by the MSMS Committee n Postgraduate Medical Education. MSMS mem- ers are urged to attend the meeting in their lo- lity.

"The importance of continuing education to ctors cannot be overestimated," states Harry . Towsley, M.D., Ann Arbor, Chairman of the onsoring MSMS Committee. "The post-graduate ctures are one of the best ways a doctor can up- te his knowledge," Doctor Towsley adds.

The following programs have been scheduled is year:

Lower Peninsula

BATTLE CREEK, OCT. 18

Dinner Meeting: A. Martin Lerner, M.D., WSU, "Viral Diseases."

GRAYLING, OCT. 20

Dinner Meeting: William J. Ledger, M.D., U-M, "Obstetrical Anesthesia and Its Complications."

HOLLAND, OCT. 7

Afternoon Clinic: David G. Dickinson, M.D., M; Stuart M. Finch, M.D., U-M; Alexander J. alt, M.D., WSU; William S. Wilson, M.D., U-M.

Dinner Meeting: Doctor Finch on "Behavior oblems in Children," and Doctor Wilson on ommon Disturbances in Cardiac Rhythm."

JACKSON, NOV. 15

Dinner Meeting: Paul W. Gikas, M.D., U-M, on raffic Accidents – The Influence of Design on jury."

LANSING, OCT. 18

Dinner Meeting: Isadore Lampe, M.D., U-M, on dvances in Radiation Therapy," and Robert Sweet, M.D., U-M, on "Current Concepts of esthesia."

MIDLAND, NOV. 17

Afternoon Clinic: Reed O. Dingman, M.D., M; F. Bruce Fralick, M.D., U-M; E. Richard rrell, Jr., M.D., U-M; Reed M. Nesbit, M.D., M; John Sheldon, M.D., U-M; Walter P. Work, D., U-M.

Dinner Meeting

MUSKEGON, OCT. 19

Afternoon Clinic: Paul V. Woolley, M.D., WSU; Bernard A. Bercu, M.D., U-M; William J. Fry, M.D., U-M.

NILES, NOV. 15

Dinner Meeting: Ernest W. Reynolds, Jr., M.D., U-M, on "The Cardiac Intensive Care Unit."

PETOSKEY, NOV. 10

Afternoon Clinic

Dinner Meeting: Reed O. Dingman, M.D., U-M, on "Recent Advances in Plastic Surgery," and George J. Brewer, M.D., U-M, on "Genetic Counseling."

TRAVERSE CITY, NOV. 8

Dinner Meeting: Andrew J. Zweifler, M.D., U-M, on "Diagnosis and Treatment of Pulmonary Embolism."

Upper Peninsula

ESCANABA, OCT. 18

Afternoon Clinic

Dinner Meeting: Thomas A. Bruce, M.D., WSU, on "Acute Myocardial Infarction," and Lawrence Power, M.D., WSU, on "The Changing Management of Thyroid Disease."

HOUGHTON, OCT. 17

Afternoon Clinic

Dinner Meeting: John F. McDermott, Jr., M.D., U-M, on "The Physician's Role in the Organization of Community Mental Health Programs," and Neal A. Vanselow, M.D., U-M, on "The Treatment of Allergic Emergencies."

IRON MOUNTAIN, OCT. 19

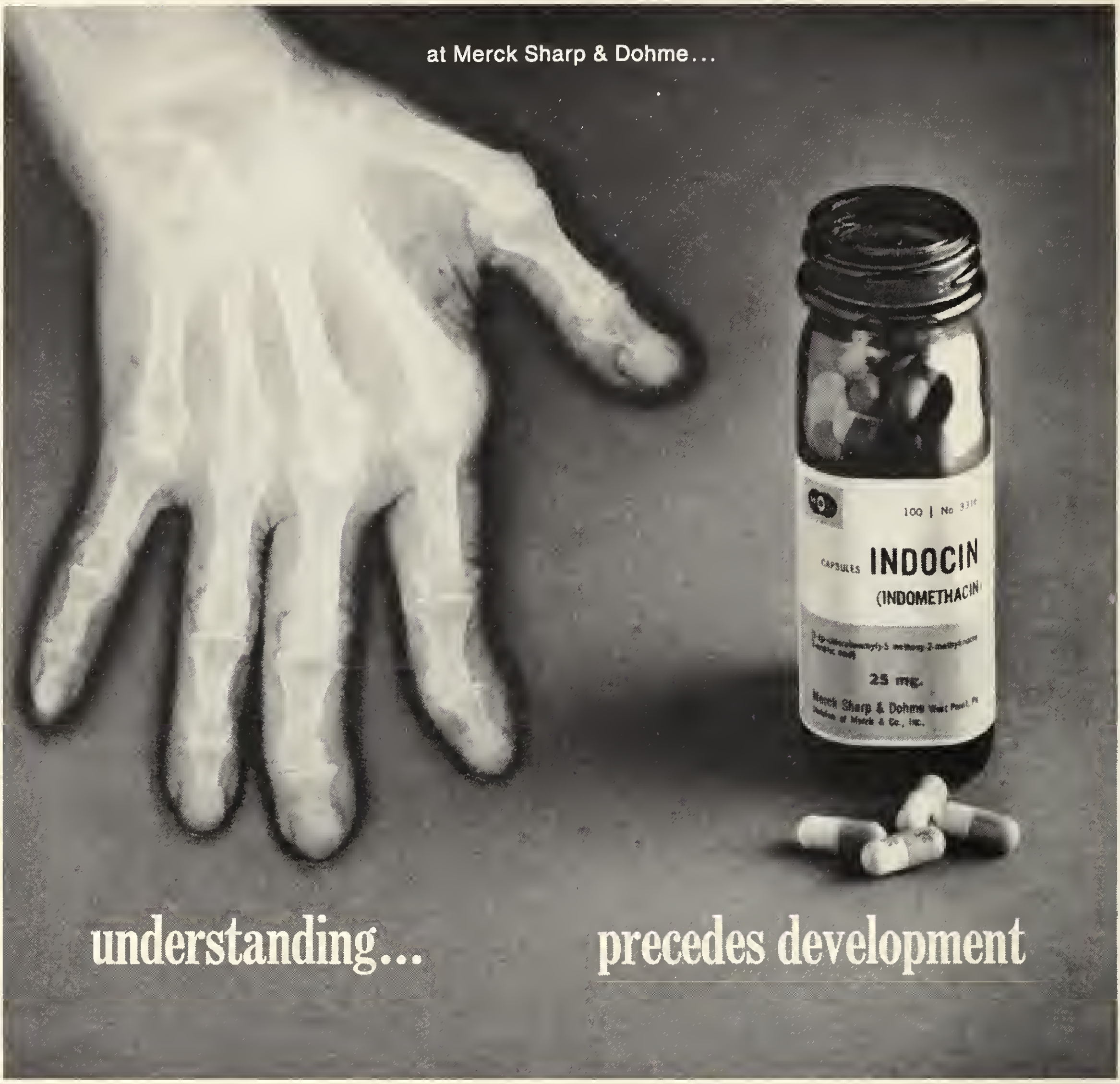
Afternoon Clinic

Dinner Meeting: John F. McDermott, Jr., M.D., U-M, on "The Physician's Role in the Organization of Community Mental Health Programs," and Neal A. Vanselow, M.D., U-M, on "The Treatment of Allergic Emergencies."

IRONWOOD, OCT. 18

Afternoon Clinic

Dinner Meeting: John F. McDermott, Jr., M.D., U-M, on "The Physician's Role in the Organiza-


at Merck Sharp & Dohme…
CAPSULES INDOCIN
(INDOMETHACIN)
25 mg.
Merck Sharp & Dohme
understanding…
precedes development

The synthesis of cortisone was accomplished by Merck Sharp & Dohme in 1948—the famous "Compound E" used by Dr. Philip Hench in his historic experiment at the Mayo Clinic.

But proud as we are of our role in the development of cortisone and subsequent corticosteroids, we have continued to seek a greater understanding of arthritic disorders and new drugs for their treatment.

One such drug—INDOCIN® (indomethacin), a nonsteroid, anti-inflammatory agent fundamentally different in structure and activity from other drugs in use—was recently made available for the treatment of arthritic conditions. It opens new possibilities for the long-term management of arthritis and inflammatory disease.

MERCK SHARP & DOHME | **where today's theory is tomorrow's therapy**
Division of Merck & Co., INC., West Point, Pa

INDOCIN®
INDOMETHACIN

Indications: Chronic and acute rheumatoid arthritis, rheumatoid (ankylosing) spondylitis, degenerative joint disease (osteoarthritis) of the hip, and gout.
Contraindications: Active peptic ulcer, gastritis, regional enteritis, or ulcerative colitis. Safety in pregnancy has not been established. Not recommended for pediatric age groups.
Warning: Patients who experience dizziness, lightheadedness, or feelings of detachment on INDOCIN should be cautioned against operating motor vehicles, machinery, climbing ladders, etc. Use cautiously in patients with psychiatric disturbances, epilepsy, or parkinsonism.
Precautions and Adverse Reactions: Most commonly, headache, dizziness, lightheadedness, G.I. disturbances. The C.N.S. effects are often transient and frequently disappear with continued treatment or reduced dosage. The severity of these effects may occasionally require cessation of therapy. G.I. effects may be minimized by giving the drug with food or with antacids or immediately after meals. Ulceration of the stomach, duodenum, or small intestine has been reported and, in a few instances, severe bleeding with perforation and death. Gastrointestinal bleeding with no obvious ulcer formation has also been noted; INDOCIN should be discontinued if G.I. bleeding occurs. As a result of G.I. bleeding, some patients may manifest anemia, and for this reason periodic hemoglobin determinations are recommended. Rare reports of effects not definitely known to be attributable to INDOCIN include bleeding from the sigmoid colon (either from a diverticulum or without a known previous pathologic condition), perforation of preexisting sigmoid lesions (diverticulum, carcinoma), and hematuria. In other rare cases, a diagnosis of gastritis has been made while the drug was being given. One patient developed ulcerative colitis, and another, regional ileitis, while receiving INDOCIN; when the drug was given to patients with preexisting ulcerative colitis, there was an increase in abdominal pain. Infrequently observed side effects may include drowsiness, tinnitus, mental confusion, depression and other psychic disturbances, blurred vision, stomatitis, pruritus, edema, and hypersensitivity reactions. Slight BUN elevation, usually transient, has been seen in some patients, although the preponderance of evidence indicates that INDOCIN does not adversely affect renal function, even in patients with preexisting renal disease. Nevertheless, renal function should be checked periodically in patients on long-term therapy. Leukopenia has been seen in a few patients. Transient elevations in alkaline phosphatase, cephalin-cholesterol flocculation, and thymol turbidity tests have been observed in some patients and, rarely, elevations of SGOT values; the relationship of these changes to the drug, if any, has not been established. As with any new drug, patients should be followed carefully to detect unusual manifestations of drug sensitivity. Before prescribing or administering, read product circular with package or available on request.

tion of Community Mental Health Programs," and Neal A. Vanselow, M.D., U-M, on "The Treatment of Allergic Emergencies."

MANISTIQUE, OCT. 18

Luncheon Meeting: Thomas A. Bruce, M.D., WSU, on "Acute Myocardial Infarction," and Lawrence Power, M.D., WSU, on "The Changing Management of Thyroid Disease."

MARQUETTE, OCT. 20

Afternoon Clinic: Thomas A. Bruce, M.D., WSU; John F. McDermott, Jr., M.D., U-M; Lawrence Power, M.D., WSU; Neal A. Vanselow, M.D., U-M.

Dinner Meeting: Doctor Power on "The Changing Management of Thyroid Disease," and Doctor McDermott on "The Physician's Role in the Organization of Community Mental Health Programs."

MENOMINEE, OCT. 19

Afternoon Clinic

Dinner Meeting: Thomas A. Bruce, M.D., WSU, on "Acute Myocardial Infarction," and Lawrence Power, M.D., WSU, on "The Changing Management of Thyroid Disease."

SAULT STE. MARIE, OCT. 17

Dinner Meeting: Thomas A. Bruce, M.D., WSU, on "Acute Myocardial Infarction," and Lawrence Power, M.D., WSU, on "The Changing Management of Thyroid Disease."

Mediscene

Oct. 11-14 — Annual Convention, Michigan Nurses Association, Jack Tar Hotel and Civic Center, Lansing

Oct. 14-15 — Annual Convention, Michigan Association for Better Hearing, Jack Tar Hotel, Lansing

Oct. 16-22 — Community Health Week

Oct. 18-19 — Annual Convention, American Cancer Society, Michigan Division, Civic Center, Lansing

Oct. 19-20 — Annual Meeting, Michigan Tuberculosis and Respiratory Disease Association, Kellogg Center, East Lansing

Oct. 20 — Annual Meeting, Michigan Thoracic Society, Kellogg Center, East Lansing

Oct. 27-29 — Annual Convention, Michigan Society for Crippled Children and Adults, Inc., Harris Motor Inn, Kalamazoo

Nov. 18-19 — American College of Physicians, Michigan Regional, Pontchartrain Hotel, Detroit

Say you saw it in Michigan Medicine

Slagle Leads Plans For 1st AMA Conclave On Socio-Economics

Effective organization and delivery of health care services will be the topic of the First National Congress on the Socio-Economics of Health Care, to be held in Chicago, January 22-23, 1967. George W. Slagle, M.D., Battle Creek, chairman of the AMA's Council on Medical Service, will sponsor the meeting with the Division of Socio-Economic Activities. Dr. Slagle states that the Congress is intended to serve as a "national forum for the interchange of information and opinion among the many areas of society concerned with health care."

"Speakers at the meeting," he adds, "will include many authorities who will report on new issues, developments, and techniques in the organization, delivery, and financing of health care services."

NEWSPAPERS HELP PROMOTE USE OF MEDI-LABELS

Newspapers across the state have been helpful in telling patients about the availability of Medi-Labels from their physicians. The articles, released originally by MSMS, invite Michigan adults to ask their doctors for the gummed sticker, containing medical data, for the new plastic driver's license.

The Lapeer County Press article declared: "Medi-Label Could Save Your Life."

The Harbor Beach Times pointed out: "Medical Society Offers Medi-Label Sticker."

The Chelsea Standard declared: "Medi-Label Sticks to Driver's License with Medical History."

The Fenton Independent reported that "Physicians Issuing Medi-Labels for Driver's Licenses."

The Hastings Banner suggested that: "New Medi-Label Could Aid in Saving Lives."

The Otsego County Herald Times at Gaylord observed that "Doctors Urge Use of Medi-Labels."

The above recent headlines are typical of the many that recognized the merit of this MSMS project, that grew out of a House of Delegates resolution.

Physicians wishing more Medi-Labels for their patients may obtain them free by writing to "Medi-Labels," MSMS, 120 West Saginaw, East Lansing.

Urges Exam for Children Include Vision Screening

The Child Welfare Committee of the Michigan State Medical Society strongly recommends that all physicians examining children include vision screening as a part of all physical examinations.

Using proven, yet simple and inexpensive methods, vision technicians throughout Michigan will screen over 50,000 pre-school children and ove 1,800,000 school children this year. An alarming number of children will fail these screening tests. Of those who fail, 97% are found to have a significant eye defect requiring treatment of one form or another. Screening instruments and techniques used are readily adaptable to the physician's office.

Information regarding instruments and techniques is readily available from the Vision Section of the Michigan Department of Public Health, 3500 N. Logan, Lansing, Michigan.

WORK CONTINUES ON SEX EDUCATION GUIDELINES FOR SCHOOLS

A committee of physicians, educators, parent and nurses is developing a new booklet on se education for Michigan schools.

Eleanor Skufis, M.D., Adrian, MSMS representative, is chairman.

The committee appointed by the State Department of Education has been asked to revise booklet on sex education published by the SD in 1959.

Edwin G. Rice, SDE Consultant on Health an Physical Education, said the barriers concernin sex "have been lowered considerably" during th last seven years. "Sex today has become an integra part of entertainment, advertising, fashion, books magazines and the mass media," Mr. Rice said "Through programs of sex education, schools ca do much to enlighten young people about sex an to combat the rise in teen-age venereal diseas and broken youthful marriages."

Mr. Rice said that traditionally sex educatio has been the function of the home or the churc but that schools must share the responsibility o teaching children and youth about sex and it proper role in human relationships.

Members of the committee named to revise th sex education guidelines are a subcommittee o the SDE Curriculum Committee on Health an Physical Education.

after surgery

B and C vitamins are therapy: Therapeutic amounts of B and C in stress formula vitamins often are vital during periods of physiologic stress. STRESSCAPS capsules, designed to meet increased metabolic demands, aid in achieving a more comfortable convalescence, a more rapid recovery. After surgery, as in many stress conditions, STRESSCAPS vitamins are therapy.

Stresscaps®
Stress Formula Vitamins Lederle

FOR PROFESSIONAL RECOMMENDATION ONLY

Each capsule contains:

Vitamin B_1 (Thiamine Mononitrate)	10 mg
Vitamin B_2 (Riboflavin)	10 mg
Vitamin B_6 (Pyridoxine HCl)	2 mg
Vitamin B_{12} Crystalline	4 mcgm
Vitamin C (Ascorbic Acid)	300 mg
Niacinamide	100 mg
Calcium Pantothenate	20 mg

Recommended intake: Adults, 1 capsule daily, for the treatment of vitamin deficiencies. Supplied in decorative "reminder" jars of 30 and 100; bottles of 500.

LEDERLE LABORATORIES, A Division of American Cyanamid Company, Pearl River, New York Lederle

627-6—3613

STRESSCAPS

Sustained circulatory, respirator and cerebral stimulation for th

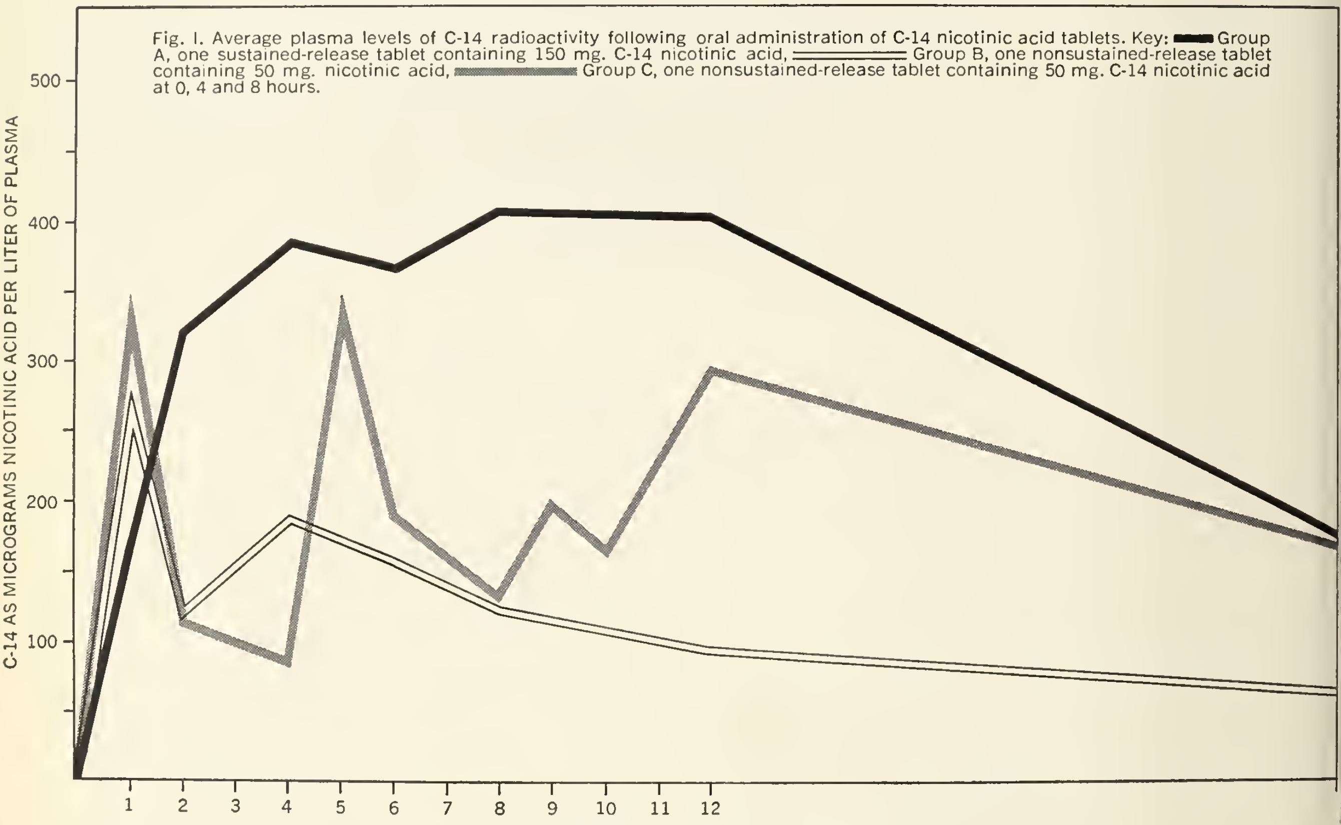


Fig. I. Average plasma levels of C-14 radioactivity following oral administration of C-14 nicotinic acid tablets. Key: ▬ Group A, one sustained-release tablet containing 150 mg. C-14 nicotinic acid, ═ Group B, one nonsustained-release tablet containing 50 mg. nicotinic acid, ▨ Group C, one nonsustained-release tablet containing 50 mg. C-14 nicotinic acid at 0, 4 and 8 hours.

(fewer absent doses by absent-minded patients)

Human volunteer subjects were administered Geroniazol TT tablets with the nicotinic acid component made radioactive with C-14. Plasma and urine samples were analyzed. (See Figures I and II) The radioactive tracer study substantiated the previous clinical evidence that the release of nicotinic acid from the Geroniazol TT tablet produced a gradual rise in plasma levels to a plateau for a total of 12 hours and more.

Such proven sustained activity makes the management of geriatric patients much easier by minimizing the possibility of neglected doses through absent-mindedness or senile confusion. Therapy *can* be con
tinuous on a daily dose of only one Geroniazol TT tab
let every 12 hours.

The gradual release of nicotinic acid in Geroniazo
TT will provide the well-known peripheral vasodilata
tion needed in patients with deficient circulation an
with a minimum amount (if any) of "flushing." Als
cerebrovascular circulation is complemented by pen
tylenetetrazol, long-established as a cerebral and res
piratory stimulant.

Geroniazol TT improves the typical, unfortunate
signs of senile confusion. Patients become more alert

ged and debilitated

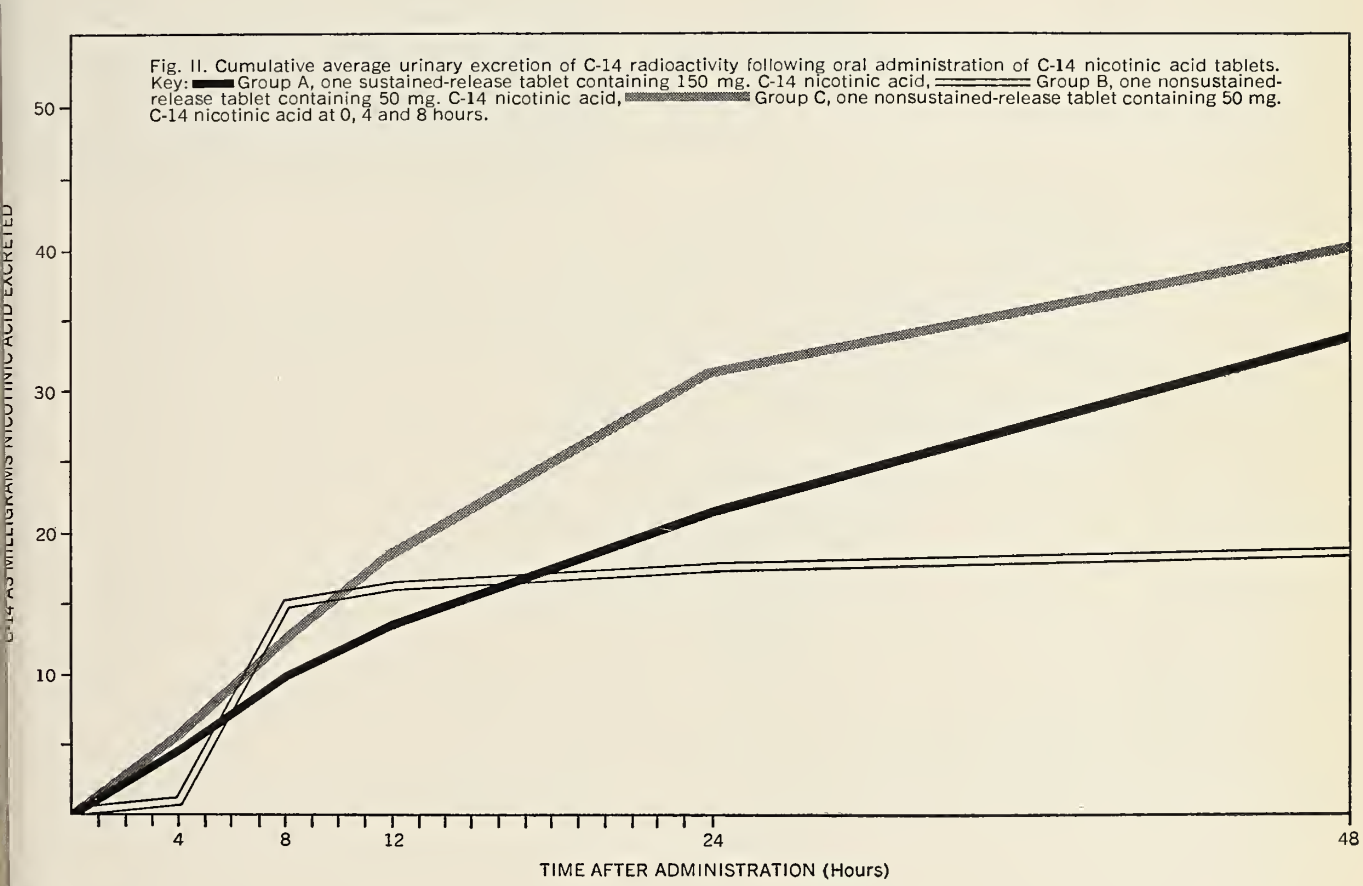


Fig. II. Cumulative average urinary excretion of C-14 radioactivity following oral administration of C-14 nicotinic acid tablets. Key: ▬ Group A, one sustained-release tablet containing 150 mg. C-14 nicotinic acid, ═ Group B, one nonsustained-release tablet containing 50 mg. C-14 nicotinic acid, ▒ Group C, one nonsustained-release tablet containing 50 mg. C-14 nicotinic acid at 0, 4 and 8 hours.

ess confused and moody. Personal care, memory, emotional stability, social attention improve. Fatigue, apathy and irritability are reduced.

A prescription for 100 tablets of Geroniazol TT will permit your patients to enjoy the benefits of time-prolonged nicotinic acid/pentylenetetrazol therapy, t an economical price. Dosage is only one tablet every 2 hours.

ontraindications: There are no known contraindica-ions.

recautions: Exercise caution when treating patients vith a low convulsive threshold.

Side Effects: Side effects are rarely encountered, however due to the vasodilatation effect of nicotinic acid, transitory mild nausea, flushing, tingling and pruritus are possible.

Dosage: One tablet every 12 hours.

Supplied: Prescribe bottles of 100 tablets, to take advantage of recent price reduction.

References: 1. Report by Nuclear Science & Engineering Corp., Pittsburgh, Pa., in files of Philips Roxane Laboratories. 2. Connolly, R.: W. Virginia Med. J. *56*:263 (Aug.) 1960. 3. Curran, T. R., and Phelps, D. K.: Am. Pract. & Digest Treat. *11*:617 (July) 1960.

"First with the Retro-Steroids"
PHILIPS ROXANE LABORATORIES
Division of Philips Roxane, Inc., Columbus, Ohio
A Subsidiary of Philips Electronics and
Pharmaceutical Industries Corp.

Geroniazol® TT
nicotinic acid 150 mg., pentylenetetrazol 300 mg.
Tempotrol® Time Controlled Tablet

Medicine-Sports Program Offered

This fall, MSMS and the county medical societies have taken the leadership to provide new assistance to coaches and trainers towards more adequate health supervision for football and other high school sports.

Under the direction and encouragement of the MSMS Committee on the Medical Aspects of Organized Athletics, the medical profession responded to new opportunities to identify with the coaches, trainers, principals, players and parents.

"The Committee is encouraged by the fine activities conducted by the several county medical societies," observed James S. Feurig, M.D., East Lansing, Chairman of the MSMS Committee. Doctor Feurig, who showed keen interest in the projects, is team physician for the MSU Spartans.

Michigan physicians stressed three factors in the various local and regional conferences for coaches, trainers and team doctors. Doctor Feurig explained that "we are concerned that the athletes have a thorough preseason health history and medical examination, that a physician be present at the games and readily available during practice sessions, and that the coach depend upon the authority from the physician before an injured player is returned to the game."

The MSMS Committee and The Council sponsored a one-day conference in June to kickoff the sports-medicine program. Team physicians from about 30 county medical societies participated in the workshop at the University of Michigan. Another one is planned for the spring of 1967, with the team physicians urged to bring their coach and trainer with them to the educational program.

"Our increased efforts in this entire field are important because in football alone, there are an estimated 65,000 boys playing on the Michigan high school squads," points out Doctor Feurig.

A conference for Western Michigan coaches, trainers, team doctors and school officials was held at Greenville, Saturday, August 20 under the sponsorship of the Ionia-Montcalm County Medical Society.

The Jackson County Medical Society provided a series of speakers for their coaches and trainers on August 25.

The St. Clair County Medical Society invited coaches and trainers from the Thumb and Blue Water areas to their workshop on September 12.

All Michigan alums will be pleased to see Charles L. Hudson, M.D., left, native of Merrill and a graduate of Alma College and the University of Michigan Medical School, wearing a striped U-M maize-and-blue tie, as he confers with AMA President-Elect Milford O. Rouse, M.D., of Dallas. The official U-M tie was given to Doctor Hudson at the AMA meeting in Chicago by Oliver B. McGillicuddy, M.D., MSMS Past President and present Secretary.

Saginaw County Medical Society offered speakers and demonstrations for their area on September 1.

The Wayne County Medical Society and the Detroit Trauma group joined to develop an interesting program for October 4.

The Kalamazoo County Medical Society leaders observed the Jackson program and then launched plans for a conference in March, 1967, to be hosted in cooperation with Western Michigan University.

Doctor Feurig presented an address at the Ingham County Medical Society September 20.

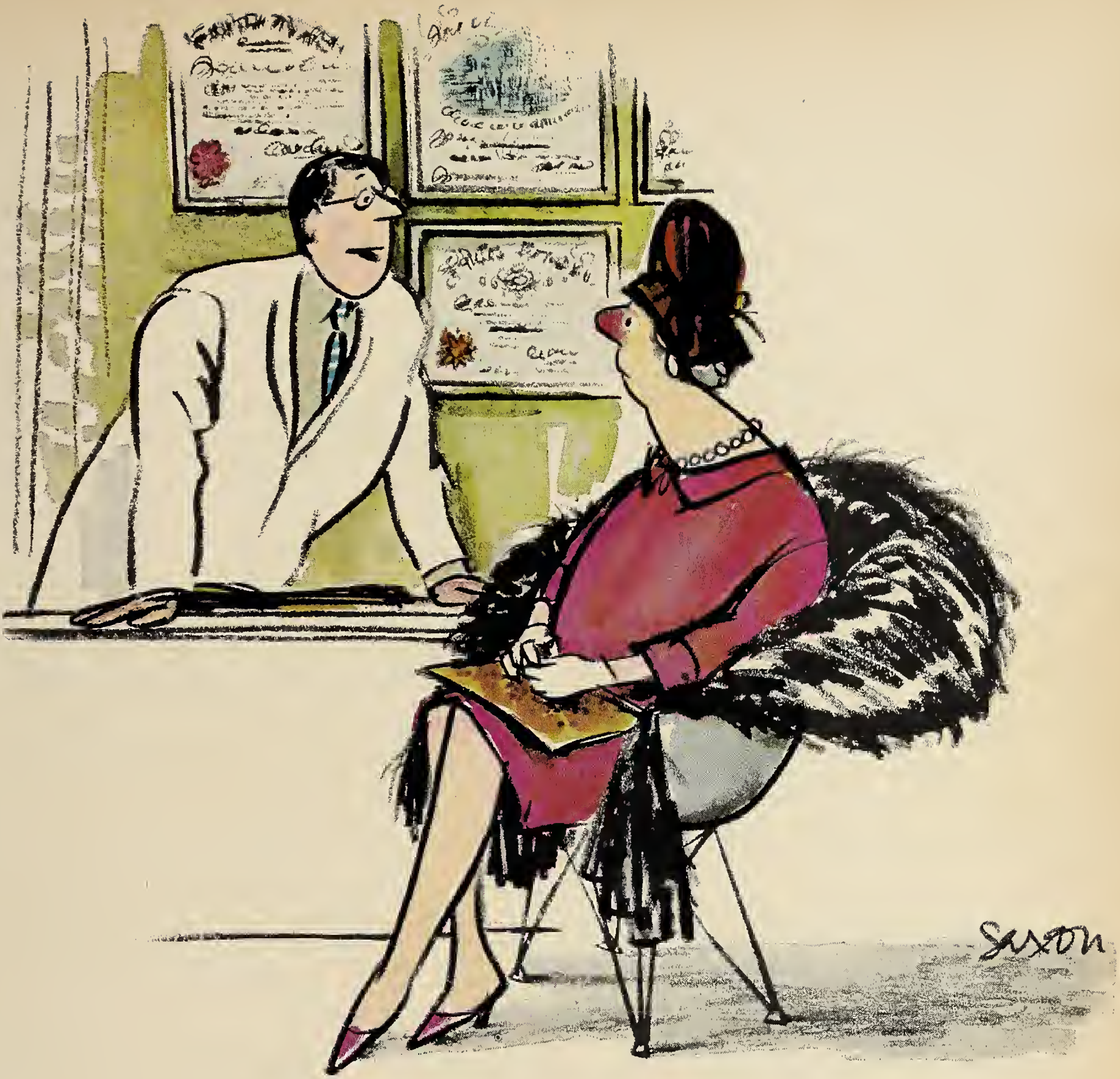
Richard Schneider, M.D., U-M neurosurgeon and member of the AMA Committee on Medical Aspects of Organized Athletics, participated in many of the conferences and spoke to the Adrian County Medical Society on September 20.

By Patronizing

Our Advertisers

You Help Support

MICHIGAN MEDICINE



Now, now, Mrs. Forsythe, we've never lost a cold patient yet.

When she's experiencing acute discomfort from cold symptoms, it's small wonder the patient becomes distressed about her condition.

She will breathe easier when you prescribe Novahistine LP. Novahistine LP is a long-acting decongestant that helps restore normal mucus secretion and ciliary activity—physiologic mechanisms which prevent infection of the respiratory tract. A dose of two tablets taken in the mornng and repeated in the evening will usually keep air passages clear for 24 hours.

Use cautiously in individuals with severe hypertension, diabetes mellitus, hyperthyroidism or urinary retention. Caution patients who operate machinery or motor vehicles that drowsiness may result.

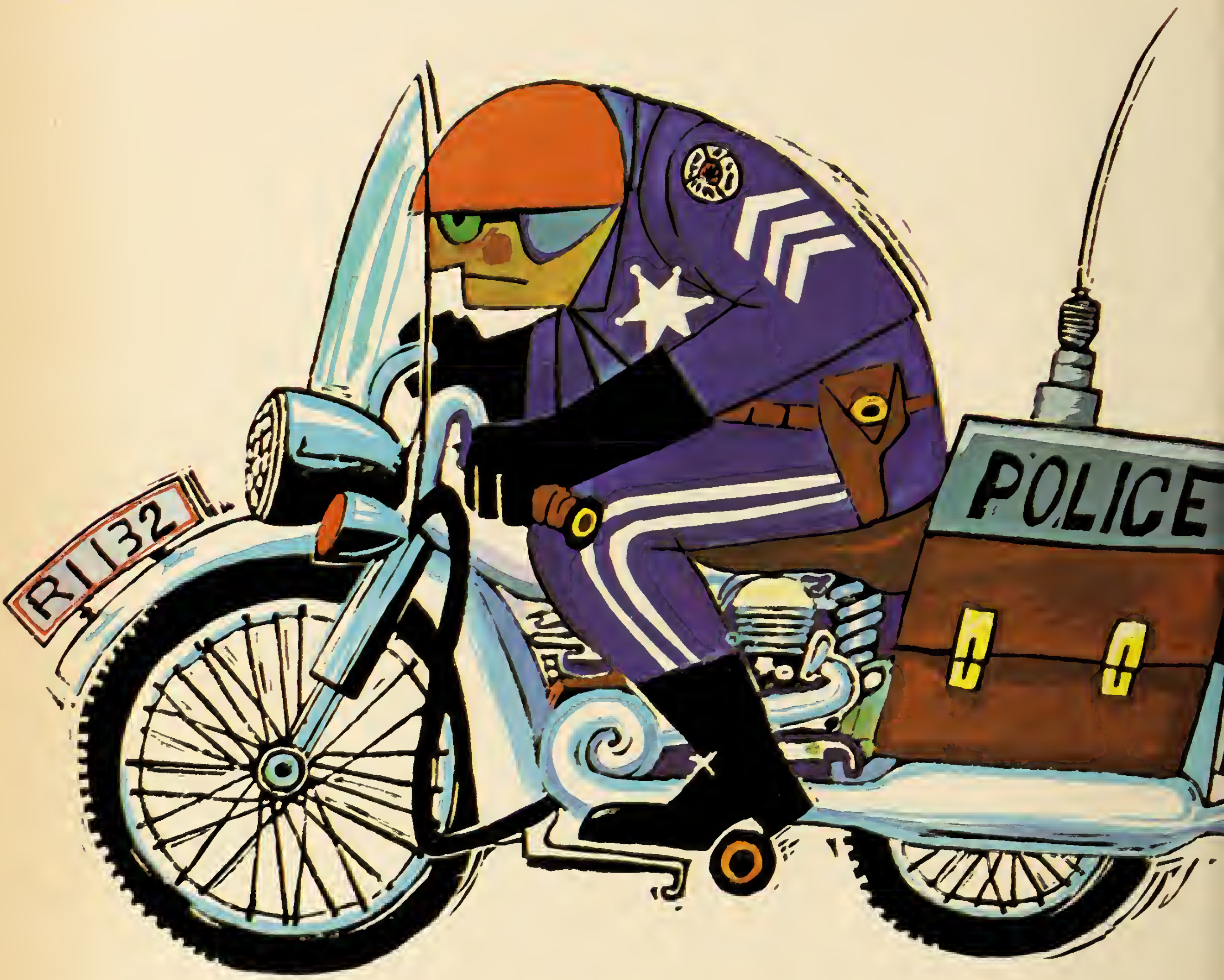
Each Novahistine LP tablet contains: phenylephrine hydrochloride, 25 mg., and chlorpheniramine maleate, 4 mg.

PITMAN-MOORE Division of The Dow Chemical Company, Indianapolis DOW

NOVAHISTINE® LP

For relief of nasal congestion.

arrest diarrhea



LOMOTIL®

Each tablet and each 5 cc. of liquid contains:
diphenoxylate hydrochloride . . . . 2.5 mg.
(Warning: May be habit forming)
atropine sulfate . . . . 0.025 mg.

Effectiveness: Lomotil possesses a unique degree of effectiveness in both acute and chronic diarrhea.

Convenience: Lomotil is supplied as small, easily carried, easily swallowed tablets and as a pleasant, fruit-flavored liquid.

Versatility: The therapeutic efficiency, safety and convenience of Lomotil may be used to advantage alone or as adjunctive therapy in diarrhea associated with:

- **Ulcerative colitis**
- **Acute infections**
- **Irritable bowel**
- **Regional enteritis**
- **Drug therapy**
- **Food Poisoning**
- **Functional hypermotility**
- **Malabsorption syndrome**
- **Ileostomy**
- **Gastroenteritis and colitis**

Dosage: For correct therapeutic effect—Rx correct therapeutic dosage. The recommended initial daily dosages, given in divided doses, until diarrhea is controlled, are:

Children: Age	Total Daily Lomotil Dosage	Lomotil Liquid Dosage (Each teaspoonful [4 cc.] contains 2 mg. of diphenoxylate HCl)
3-6 months .	3 mg.	½ tsp. 3 times daily
6-12 months .	4 mg.	½ tsp. 4 times daily
1-2 years . . .	5 mg.	½ tsp. 5 times daily
2-5 years . . .	6 mg.	1 tsp. 3 times daily
5-8 years . . .	8 mg.	1 tsp. 4 times daily
8-12 years .	10 mg.	1 tsp. 5 times daily

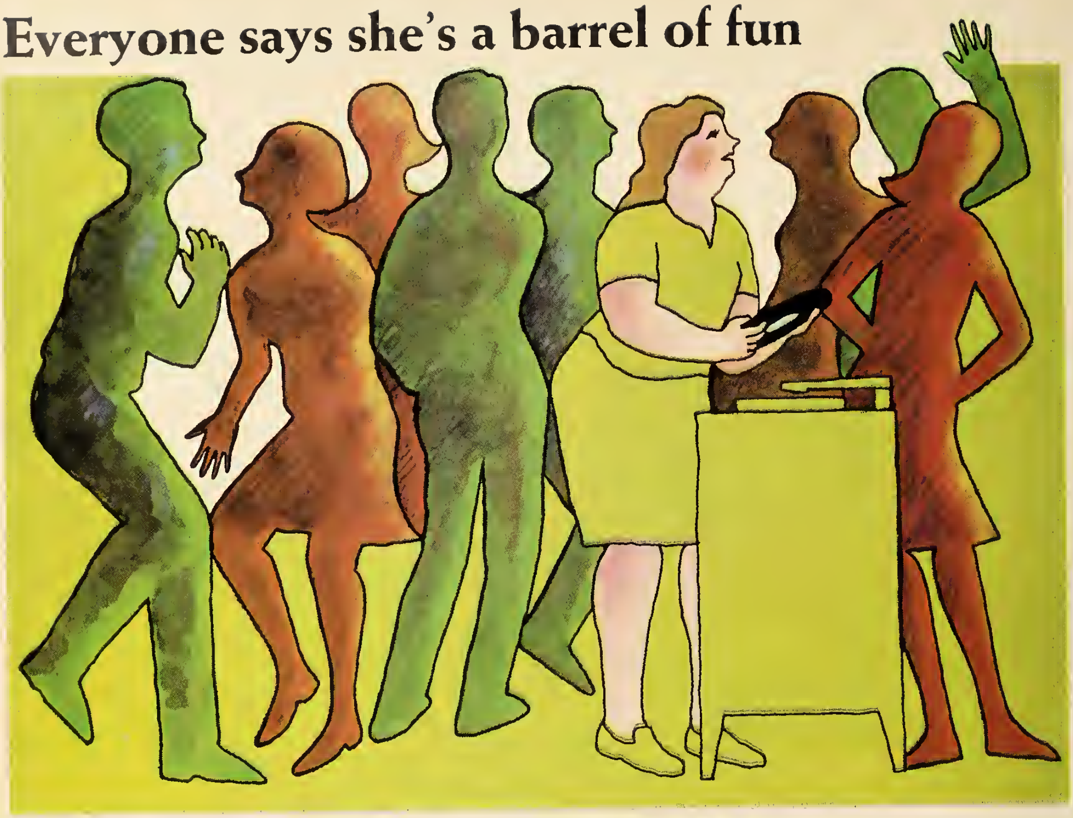
Adults: 20 mg. (2 tsp. 5 times daily or 2 tablets 4 times daily) Based on 4 cc. per teaspoonful. Maintenance dosage may be as low as one-fourth the initial daily dose.

Precautions: Lomotil, brand of diphenoxylate hydrochloride with atropine sulfate, is a Federally exempt narcotic preparation of very low addictive potential. Recommended dosages should not be exceeded. Lomotil should be kept out of reach of children since accidental overdosage may cause severe respiratory depression. Lomotil should be used with caution in patients with impaired liver function and in patients taking addicting drugs or barbiturates. The subtherapeutic amount of atropine is added to discourage deliberate overdosage.

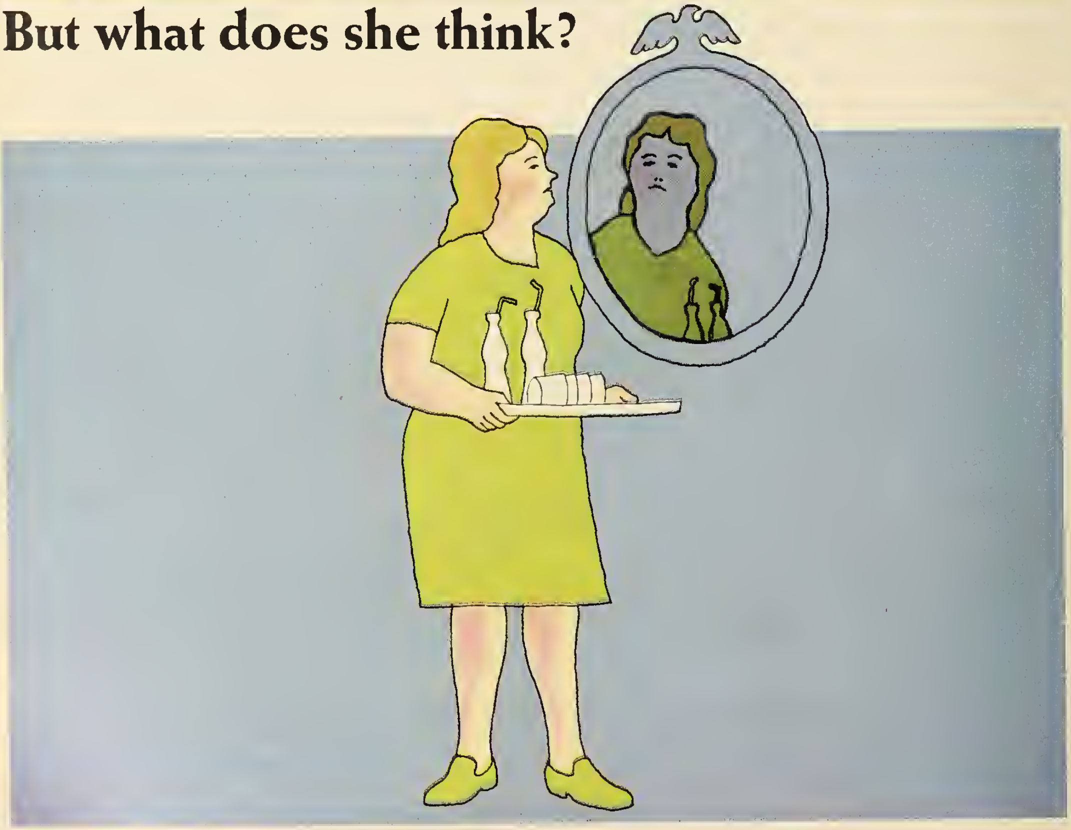
Side Effects: Side effects are relatively uncommon but among those reported are gastrointestinal irritation, sedation, dizziness, cutaneous manifestations, restlessness, insomnia, numbness of extremities, headache, blurring of vision, swelling of the gums, euphoria, depression and general malaise.

SEARLE *Research in the Service of Medicine*

Everyone says she's a barrel of fun



But what does she think?



Many overweight patients can benefit from the appetite control provided by the sustained anorexigenic-tranquilizing action of BAMADEX SEQUELS: anorexigenic action of amphetamine; tranquilizing action of meprobamate; prolonged action through sustained release of active ingredients.

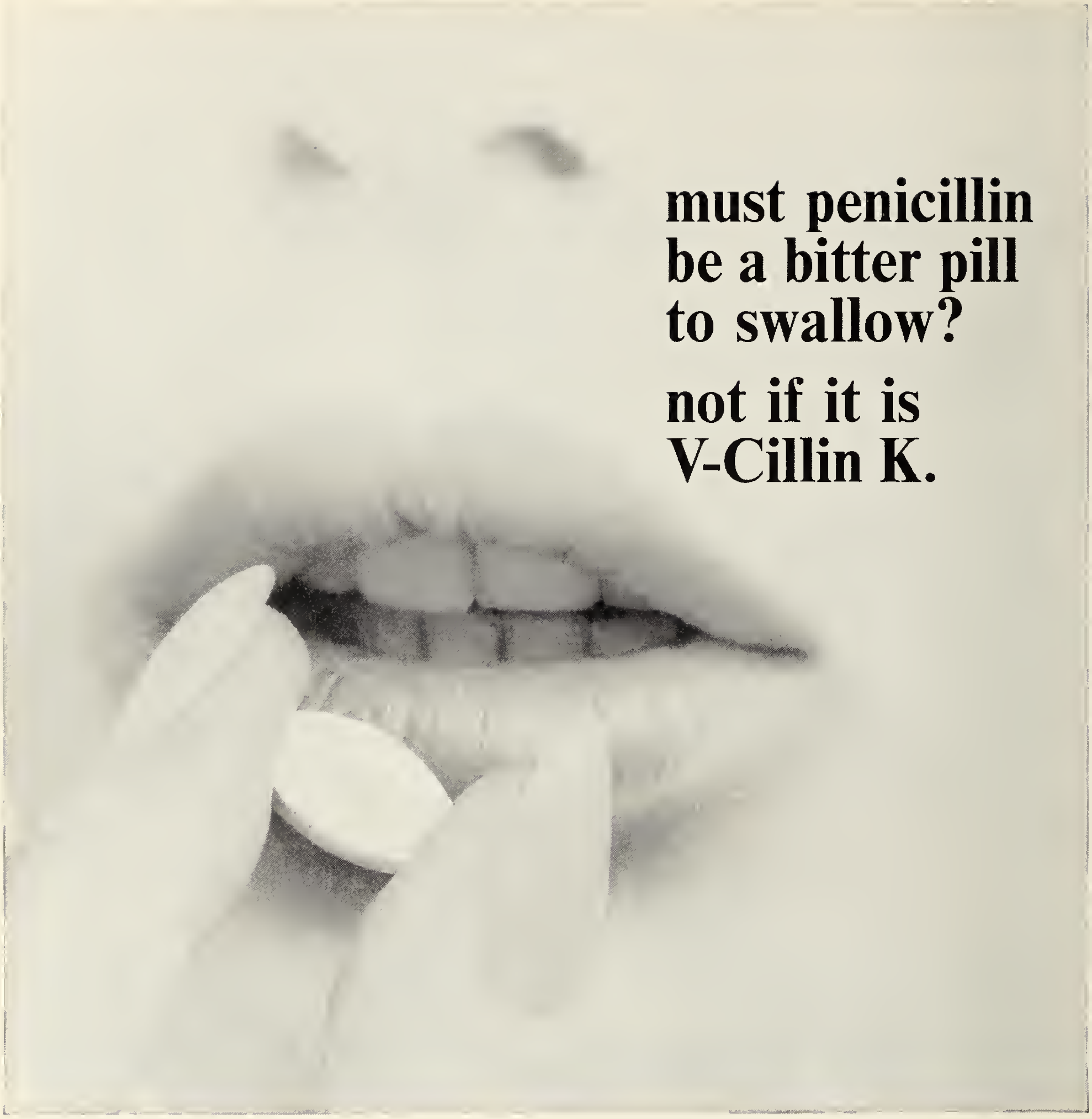
Bamadex® Sequels®

DEXTRO-AMPHETAMINE SULFATE (15 mg.) SUSTAINED RELEASE CAPSULES
WITH MEPROBAMATE (300 mg.)

to help establish a new dietary pattern

Contraindications: Dextro-amphetamine sulfate: in hyperexcitability and in agitated prepsychotic states. Previous allergic or idiosyncratic reactions to meprobamate.
Precautions: Use with caution in patients hypersensitive to sympathomimetic compounds, who have coronary or cardiovascular disease, or are severely hypertensive.
Dextro-amphetamine sulfate: Excessive use by unstable individuals may result in psychological dependence.
Meprobamate: Careful supervision of dose and amounts prescribed is advised, especially for patients with known propensity for taking excessive quantities of drugs. Excessive and prolonged use in susceptible persons, e.g. alcoholics, former addicts, and other severe psychoneurotics, has been reported to result in dependence on the drug. Where excessive dosage has continued for weeks or months, reduce dosage gradually. Sudden withdrawal may precipitate recurrence of preexisting symptoms such as anxiety, anorexia, or insomnia; or withdrawal reactions such as vomiting, ataxia, tremors, muscle twitching and, rarely, epileptiform seizures. Should meprobamate cause drowsiness or visual disturbances, reduce dosage and avoid operation of motor vehicles, machinery or other activity requiring alertness. Effects of excessive alcohol consumption may be increased by meprobamate. Appropriate caution is recommended with patients prone to excessive drinking. In patients prone to both petit and grand mal epilepsy meprobamate may precipitate grand mal attacks. Prescribe cautiously and in small quantities to patients with suicidal tendencies.
Side Effects: Overstimulation of the central nervous system, jitteriness and insomnia or drowsiness.
Dextro-amphetamine sulfate: Insomnia, excitability, and increased motor activity are common and ordinarily mild side effects. Confusion, anxiety, aggressiveness, increased libido, and hallucinations have also been observed, especially in mentally ill patients. Rebound fatigue and depression may follow central stimulation. Other effects may include dry mouth, anorexia, nausea, vomiting, diarrhea, and increased cardiovascular reactivity.
Meprobamate: Drowsiness may accur and can be associated with ataxia; the symptom can usually be controlled by decreasing the dose, or by concomitant administration of central stimulants. Allergic or idiosyncratic reactions: maculapapular rash, acute nonthrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever, transient leukopenia. A case of fatal bullous dermatitis, following administration of meprabamate and prednisolone, has been reported. Hypersensitivity has produced fever, fainting spells, angioneurotic edema, bronchial spasms, hypotensive crises (1 fatal case), anuria, stomatitis, proctitis (1 case), anaphylaxis, agranulocytosis and thrombocytopenic purpura, and a fatal instance of aplastic anemia, but only when other drugs known to elicit these conditions were given concomitantly. Fast EEG activity, usually after excessive dosage. Impairment of visual accommodation. Massive overdosage may produce drowsiness lethargy, stupor, ataxia, coma, shock, vasomotor and respiratory collapse.

Lederle
LEDERLE LABORATORIES
A Division of American Cyanamid Company,
Pearl River, New York
695-6


must penicillin be a bitter pill to swallow?
not if it is V-Cillin K.

V-Cillin K now has a unique glossy coating that banishes bitter penicillin taste and makes it easier to swallow. Within six seconds (just long enough for the tablet to get past the taste buds), the coating dissolves and the penicillin is ready for immediate absorption into the bloodstream. The patient still gets all the special benefits of V-Cillin K, including consistent dependability . . . even in the presence of food.

Indications: V-Cillin K is an antibiotic useful in the treatment of streptococcus, pneumococcus, and gonococcus infections and infections caused by sensitive strains of staphylococci.

Contraindications and Precautions: Although sensitivity reactions are much less common after oral than after parenteral administration, V-Cillin K should not be administered to patients with a history of allergy to penicillin. As with any antibiotic, observation for overgrowth of nonsusceptible organisms during treatment is important.

Usual Dosage Range: 125 mg. (200,000 units) three times a day to 250 mg. every four hours.

Supplied: Tablets V-Cillin K, 125 or 250 mg., and V-Cillin K, Pediatric, 125 mg. per 5-cc. teaspoonful, in 40, 80, and 150-cc.-size packages.

V-Cillin K® **Six-Second Barrier to Bitterness**

Potassium Phenoxymethyl Penicillin

601098

Additional information available to physicians upon request. Eli Lilly and Company, Indianapolis, Indiana 46206.

Lilly

ORIGINAL
SCIENTIFIC
ARTICLE

Medicine As a Social Institution

y Lester J. Evans, M.D.
ast Lansing

In its totality, medicine consists of a vast complex of knowledge, beliefs, techniques, roles, norms, values, ideologies, attitudes, rituals, customs, and symbols that interlock to form a mutual reinforcing and supporting system. Such a system is designated by the term "institution." Medicine as an institution is integrated with other major institutional complexes — government, religion, the family, art, education, the economy — into a functioning whole which is culture.[1]

We are in the early or possible mid-stage of
ree or four decades of growth and change in
edicine. In historical retrospect, this period will
ave as much or more social and scientific signifi-
nce than the early decades of this century when
e possibility of scientific medicine emerged as a
ality. In the year 2000 we should be able to
ok back on this period as the time when medi-
ne evolved into a full blown, easily identifiable
d definable social institution whose relation-
ips with other social institutions will be under-
ood.

While the contrast between these two periods —
e early decades of this century and the present
is apparent, we are apt to continue to think of
e activities of medicine and to make judgments
terms of the attitudes, areas of knowledge, and
ills which had become firmly established well
efore 1930. Yet, we know our current situation
different, and calls for fresh approaches to old
oblems.

Let me illustrate by pointing to certain changes which have occurred in our lifetime.

The percent of change in certain measures of health developments from the early part of this century leaves little doubt that something quite fundamental has happened. Had we been looking ahead as we should be now, the current events in the socio-economic life of medicine would have come as no surprise. While the total population has doubled since 1910 (and will continue to increase at a more rapid rate) the overall death rate has dropped by 50 per cent and life expectancy at birth has increased by over 40 per cent. The per capita expenditures measured in equivalent dollars have gone up over 150 per cent. But the most significant fact is that as the gross national product of the country has been increased phenomenally in recent decades, the percent of the gross national income spent on health has increased even more rapidly. Since the mid thirties, our society has upped the proportion of the gross national product spent on health by 50 per cent.

Today our society is supporting a health industry which employs more than 2,500,000 people (only two other industries, agriculture and construction, employ larger numbers) and costs more than $30 billion a year. About two-thirds of this money is spent on personnel employed in the health industry and about one-sixth is for physical capital. The remainder goes for goods and services purchased from other industries. The economics of the health industry is a subject with which we will have to become increasingly familiar; it encompasses the whole field in a way that more limited considerations of specific financial transactions do not. We might think of economics as a

The Author

Lester J. Evans, M.D.

---

*Doctor Evans is a Visiting Professor in the Col-
ge of Human Medicine of Michigan State Uni-
rsity. He was formerly executive associate for
edical affairs of the Commonwealth Fund for 31
ars. This paper was delivered at the Conference
Medical News Writing, sponsored by the Mich-
an State Medical Society, the MSU College of
uman Medicine, and other groups, May 5, 1966.*

Medicine is in a period of change which will have as great a signifi cance as the emergence of scientific medicine in the first part of thi century. To meet the challenge ahead, we must give attention to re conceptualizing the phenomena of health and illness in terms of th total human life process. To do this, our universities must mak education of health professionals and research in all aspects of healt integral functions of the university.

way of approaching public policy on financing and organizing health and medical services.

Other changes have paralleled the economic. Possibly the most significant is the contrast in need for health services — or rather the problems facing the health professions for solution — between the early decades of the century and now. Then, the problem was the high mortality from conditions such as infection, childbirth, and nutritional disorders; now the problem is to create an effective life for those who escape such hazards. Then the way was opened for the study of the biological factors of organic disease; now the way is opening for the study of social, cultural and psychological factors of health and illness in terms of the continuum of the human life process. Then medicine was focused on the struggle of the individual for survival; now it is concerned with healthful living for those achieving longevity in an evolving urban society. Then medicine became firmly based on the natural sciences as they were developing in the university; now it must become equally based on the social and behavioral sciences as they are evolving in the university. The full potential of the present era will be realized in good part by the extent to which these sciences become inextricably involved in all health activities — service, research and education.

Two topics in my opinion are crucial to an attack on the problems facing us. One is the reconceptualization of the phenomena of health and illness and the other is the education of health professionals.

In discussing the new way of viewing health and illness, I want to start with a quotation from two sociologists:

> *It has become apparent that the understanding of health and disease requires a holistic frame of reference in which the psychological, social and cultural aspects of human behavior are appropriately related to the biological nature of man and the physical environment in which he lives.*[2]

The significance of this statement is that we have moved from an era in which disease was equated almost wholly with visible or chemically identifiable changes in organ morphology and function. We now live in an age when the ph nomena of health and illness must also be inte preted in terms of the socio-psychological-biolog cal continuum of the human life process.

Do not mistake me. I do not think we hav solved the organic component of illness. In spit of our excellencies, large segments of our popul tion are unattended or ill cared for in the trad tional medical sense. How else can we account fc the fact that the U.S. ranks 11th in age-adjuste death rates when compared to other develope countries especially of western Europe? Or th our death rate among males of ages 45 to 54 - a critical age group from the point of view of pr duction — is the highest among 19 countries an almost double that of some other countries? C that in our own country, the age-adjusted deat rate for whites only in the highest state is 33 pe cent greater than in the lowest? Or that the higl est infant mortality rate is 55 per cent above tl lowest; and the death rate for males 45 to 54 i the worst state is 60 per cent higher than in tl state with the lowest rate?

These are facts we cannot ignore, but the should not delay us in getting on with preparatio for the future.

Returning now to the reconceptualization of tl phenomena of health and illness in terms of tl

Back To School

The MSMS Committee on Postgraduate Medical Education will offer 19 extramural courses this fall for MSMS members across the state.

The series, which began September 29, will continue through November 17.

Programs have been mailed to the physicians in the areas being served by the visiting university professors.

Assisting MSMS in the annual fall and spring series are the Medical Schools of the University of Michigan and Wayne State University and the Michigan Department of Public Health.

ife process, I want to draw heavily on a recent rticle by Anthony M. M. Payne, professor of epi- emiology at Yale. Arguing that innovation can row out of unity, he cites the necessity for taking fresh look at all the factors involved in the inci- ence of disease. His thesis in essence is that we hould attempt to reclassify diseases according to concept of causation. This concept, he maintains, hould include the sum of those factors, extrinsic nd intrinsic, which combine to initiate the intrin- ic mechanism which in turn leads to certain ef- ects which may be defined as disease.

He illustrates by referring to tuberculosis as one f the poverty diseases but points out that in high- y developed countries the picture is quite differ- nt from countries in which tuberculosis is a most erious disease of infancy and childhood and is ssociated with malnutrition, overcrowding, and ll the other social deficiencies with which we are miliar. (Not unlike some of our poverty areas.)

He offers many additional illustrations:

> *Thus the cause of diabetes, for instance, is not deficiency of insulin; that is part of the mechanism. The cause lies further back, in genetically determined forms perhaps generations back; in acquired forms, behavioral and environmental influences are concerned. The cause of coronary thrombosis is not the formation of a thrombus which blocks the artery, nor is it the atheromatous process or changed coagulability of the blood. These are mechanisms. The causes lie further back in behavioral and environmental factors, including diet, exercise, occupation, stress, etc.*[3]

If, however, we are to have any meaningful re- onceptualization of our ideas about health and lness, it follows that there must be renewed em- hasis in the university on education of health rofessionals and research in all aspects of health. ociety expects leadership from its universities and nstitutions of higher learning. There would have een no scientific medicine as we know it without em. It is in the universities where there must be ntinued attack on illness — organic, psychologi- l and social.

Likewise a whole new era of research in patient- re and organization of health and medical serv- es will have to be initiated through joint univer- ty and community effort if we are to learn how improve our performance in getting the fruits existing medical knowledge to those who need . This combined effort is imperative in attacking nmet health needs if the relative health position the United States in the World is to be recti- ed.

Education of health professionals for research, aching, and practice within the framework of a oadened concept of illness can take place only the university. It was there that medicine found the natural sciences on which it became based in our era. It is there that the social and behavioral sciences are developing in a way that gives assurance that medicine in all aspects will evolve as a recognizable social institution in the foreseeable future.

The health professionals of the future will be able to fulfill their functions only if they grow up in an educational setting where the proper admixture of biological and behavioral knowledge and skills are brought to bear on the solution of human health problems in our rapidly changing society.

REFERENCES

1. Saunders, Lyle. "Cultural Difference and Medical Care." Russell Sage Foundation, New York, 1954, p.7.
2. Straus, Robert, and Clauson, John A. "Health, Society and Social Science." The Annals of the American Academy of Political and Social Science, March 1963. p.1.
3. Payne, Anthony M. M., Milbank Memorial Fund Quarterly, October 1965.

Stresses Role of Volunteers

"It is impossible for a trade or professional association to be truly successful without the volunteer work — mental or physical — of its members. An association's effectiveness scales upward in direct proportion to the enthusiasm and effort of its members."

So declares a publication of the Association Service Department of the Chamber of Commerce of the United States.

The publication, "Modern Day Associations: What They Are and What They Do," also in part states:

"Services rendered, to members and the public, by an association stem from the association's activities, which vary according to the needs and requirements of the particular trade, industry or profession represented.

"A complete list of association activities would probably number 100 or more, ranging all the way from accounting and advertising services, through education and research, to taxation and world trade.

"The Association Service Department of the Chamber of Commerce of the United States regularly conducts surveys and studies on the activities of associations.

"The most recent such study reported on the nine major activities of these organizations — these activities were:

"Public relations, government relations, advertising and marketing, education, employer-employee relations, statistics, research, and accounting and standardization.

"Today there are approximately 13,000 associations — national, regional, state and local in scope."

ORIGINAL
SCIENTIFIC
ARTICLE

Pediatric Diagnostic Methods In Adult Urology

By Arthur J. Johnson, M.D.
James R. Leach, M.D.
Both of Detroit

In little more than a decade there has been a remarkable growth in knowledge of urologic diseases of children. From this knowledge, a fairly standardized diagnostic protocol has evolved which includes:

Pertinent history.

Pertinent physical examination.

Urinalysis, preferably by the examining physician.

Detection of bacteriuria and, when indicated, antibacterial sensitivity studies.

Estimation of renal function. Blood urea nitrogen and serum creatinine will suffice in most clinical situations.

Cystourethrography. The cine' techniques is generally preferred if it is available.

Excretory urography. If there is sensitivity to urographic contrast media, impaired renal function, or unsatisfactory excretory urograms, retrograde pyelography may be necessary.

Calibration of the urethra in females with bougie a' boule. Sounds and tapered dilators are not sensitive instruments for calibration since they dilate as they are introduced. Bougie a' boule will often localize the site of obstruction by "hanging" on withdrawal.

Cystoscopy and urethroscopy.

Williams and Woodward, when discussing pediatric diagnosis said, "It cannot be overemphasized that urologic evaluation must proceed in an orderly fashion and that unsuspected traps await those who omit, without good reason, a part of the usual urologic evaluation."[1]

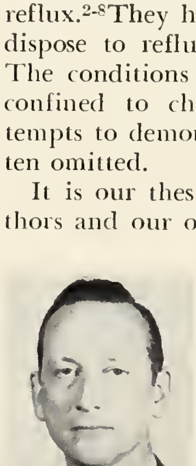
Since this protocol has been of immense value in the diagnosis of urologic problems of children, it seems appropriate to explore the possibility that it might be of value, if used routinely, in the diagnosis of specific urologic problems of adults.

The pediatric protocol varies from the usual diagnostic methods employed in adult practice by the *routine* inclusion of cystourethrography and calibration of the female urethra. These studies facilitate the diagnosis of vesical outlet obstruction and permit detection of vesicoureteral reflux.

Vesical outlet obstruction is a well recognized predisposing factor for urinary infection, vesical calculi, and vesicoureteral reflux. In adult males the diagnosis is often made quite easily by urethroscopy. In females, the diagnosis can be much more difficult. The addition of voiding urethrography to demonstrate the dynamic function of the vesical outlet is valuable in both sexes, and calibration of the urethra in the female gives a third method for diagnosis of this most difficult problem.

Hutch and his co-workers, as well as a number of other investigators, have reported the anatomic and physiologic considerations of vesicoureteral reflux.[2-8] They have presented the factors that predispose to reflux, and have shown the sequellae. The conditions they presented were by no means confined to children, yet in adult urology, attempts to demonstrate vesicoureteral reflux are often omitted.

It is our thesis, based on the work of these authors and our own clinical experience, that inclu



Co-author
Arthur J. Johnson, M.D.

Doctors Johnson and Leach are associated with the Department of Surgery, Division of Urology, Henry Ford Hospital, Detroit. This paper was presented at the North Central Section of the American Urological Association in Minneapolis in 1965.

protocol for evaluation of urologic diseases of children has re- ently evolved. This includes history, physical examination, urinal- sis, detection of bacteriuria, estimation of renal function, cystoure- hrography, urography, urethral calibration, and endoscopy. Cys- ourethrography and urethral calibration are often omitted from the dult diagnostic program. Application of this complete battery, how- ver, is most rewarding when applied to specific urologic problems of dults.

on of urethral calibration and voiding cystoure- hrography should now become routine in specific roblems of adult urology. While further uses for e pediatric diagnostic protocol in adult practice ay develop, we have, for the present, accepted indications.

1. *Troublesome persistent and/or recurrent ur- ary infections.* In a small but significant per- ntage of these cases, outlet obstruction, vesico- reteral reflux or both will be detected.

2. *Renal atrophy.* Hutch has discussed the roll vesicoureteral reflux in the genesis of this con- tion.[4]

3. *Unexplained pyelocaliectasis, and/or ureter- tasis.* Even relatively minor degrees of calyceal osion suggest the possibility of reflux or obstruc- on. Hutch[5] has proposed a theory of non-occlu- ve dilatation of the renal pelvis based on the emise that any normal ureter will dilate if called pon to transport a volume of urine exceeding at of the emptying capacity of any of its seg- ents. The source of the excessive load can be sicoureteral reflux.[5,6]

4. *Neurogenic bladder disease.* It is commonly cepted that patients with neurogenic bladder dis- se will often develop vesicoureteral reflux and rotic changes at the vesical neck. These changes mper adequate emptying, predispose to infec- n, and perhaps play a major part in the fre- ent life threatening renal deterioration.[7,8]

5. *Severe calculous disease, particularly if asso- ated with anatomic distortion and/or infection.* noted above, vesicoureteral reflux can predis- se to infection and can result in dilation of the per urinary tract. Each of these conditions pre- spose to calculous formation. It would seem obable that the increased incidence of reflux in raplegics may be one of several factors in the quent development of upper urinary tract cal- li in these patients.

6. *Persistent infection after nephrectomy for cal- lous or inflammatory disease.* Bruce and Awad ve brought attention to the fact that this may due to reflux into a residual ureteral stump. e have infrequently encountered this condition.[9] Hopefully, this indication may be abandoned in the future if reflux is routinely detected preoperatively by following this diagnostic protocol in accordance with the other indications.

We have selected eight cases that demonstrate most of these categories. They are but a few of many that have had outlet obstruction or ureteral reflux diagnosed by this orderly program. A few of these cases date back several years, before we had fully developed our protocol, so there have been a few diagnostic omissions, but each case demonstrates the value of one or more of the various steps. Regrettably, cases of refluxing ureteral stumps after nephrectomy from our practice cannot be retrieved.

CASE REPORTS

CASE 1. A 68 year old man had had persistent pyelonephritis with acute life-threatening exacerbations since a prostatectomy several years earlier. He had undergone repeated urological evaluations. Physical examination showed mild left costovertebral angle tenderness and focal induration of the prostate compatible with inflammatory disease. Anal and bulbo-cavernosus reflexes were absent. Urinalysis showed low grade albuminuria, microhematuria, and a marked bacteriuria. Numerous cultures showed coliform organisms. Blood urea nitrogen and serum creatinine were normal. Cystograms showed a large bladder with marked left vesicoureteral reflux. (Fig. 1, A). Excretory urograms showed normal renal architecture. (Fig. 1, B). Cystoscopy demonstrated a very mild bladder neck contracture without significant obstruction. A cystometrogram revealed a large bladder capacity, but no other abnormalities. He has remained abacteriuric after a course of Polymixin B.

It is probable that this man's reflux contributed to the perpetuation of his infection. He very possibly had an incomplete neurogenic bladder that may have predisposed to the reflux.

CASE 2. A 52 year old woman presented with a history of urinary infections intermittently for about three years. These had been characterized by fever, chills, painful urination, and flank pain.

Physical examination showed no pertinent abnormalities except moderate bilateral flank tenderness. Urinalysis demonstrated albuminuria, crystalluria, and bacteriuria. Urine culture produced a growth of Enterococci and Pseudomonas. Blood urea nitrogen and serum creatinine were normal. Cystourethrograms showed bilateral vesicoureteral reflux. (Fig. 2, A). Urography showed an archi-

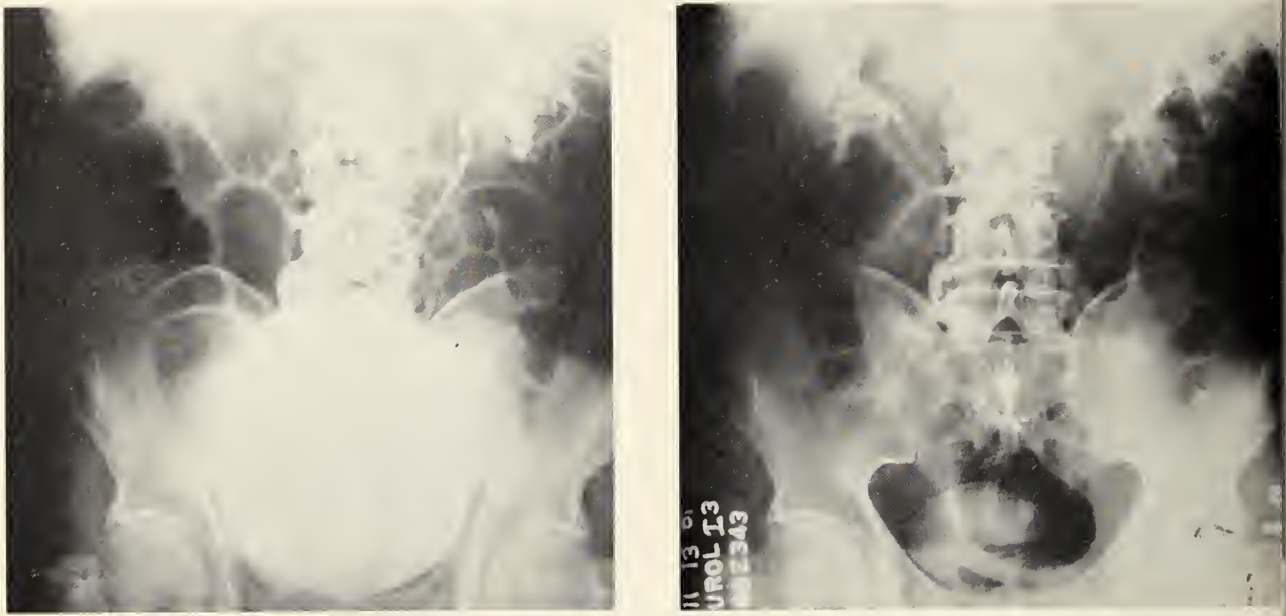


Fig. 1. Case 1. A, at left: Cystogram showing large smooth bladder and left vesicoureteral reflux. B, at right: Normal excretory urograms.

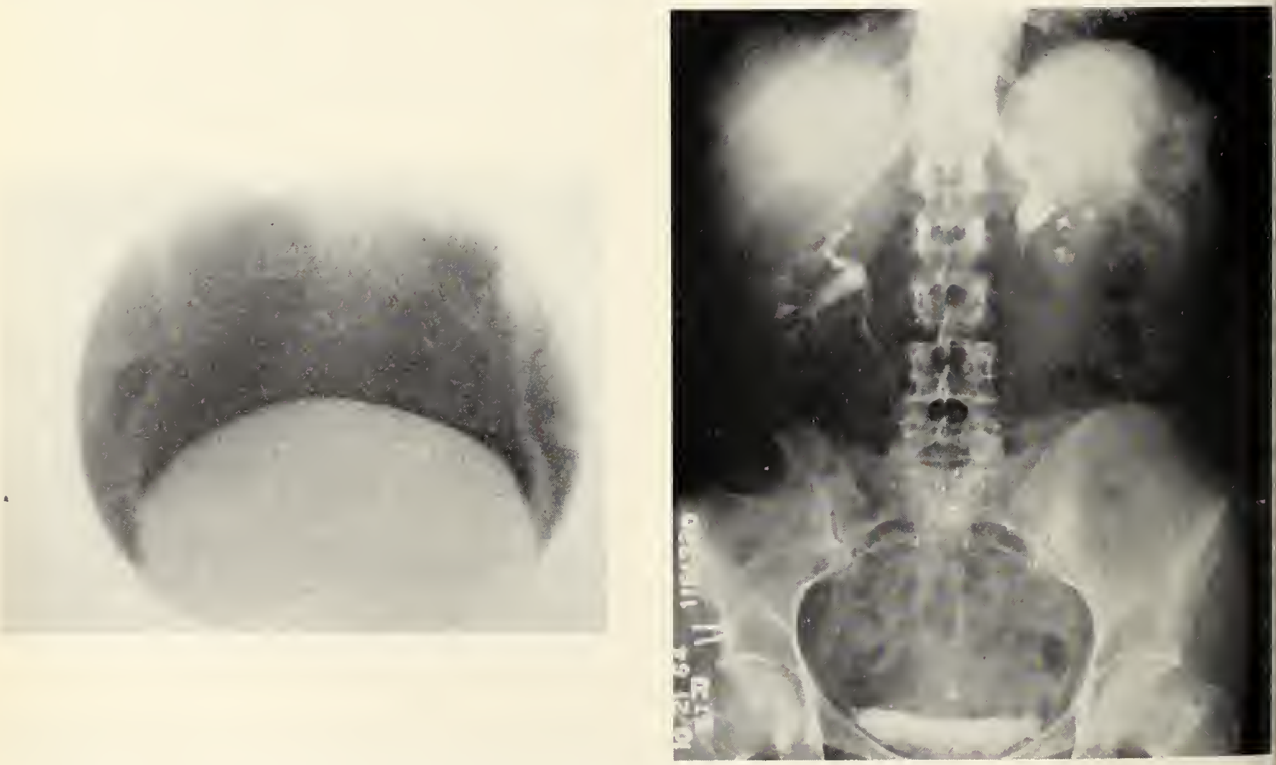
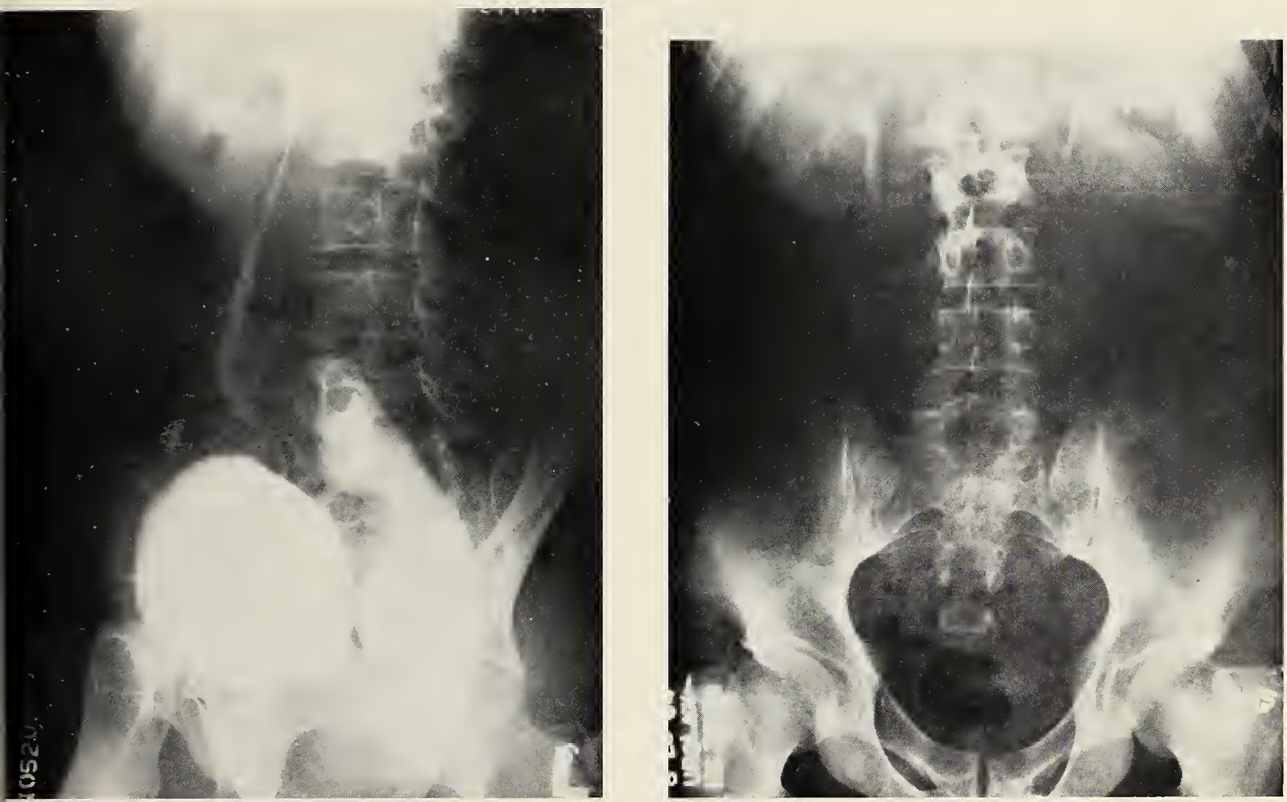


Fig. 2. Case 2. A, at left: Cystourethrogram demonstrates bilateral vesicoureteral reflux. B, at right: Excretory urograms show inflammatory changes and reduction of renal cortex on the left.



g. 3. Case 3. A, at left: Cystourethrogram shows right vesicoureteral reflux and a diverticulum of the ladder. B, at right: Excretory urograms are suggestive of inflammatory disease.

cturally normal right kidney with reduction in ze of the left kidney and some irregularity of the ft collecting system. (Fig. 2, B). Calibration of e urethra and cystourethroscopy showed no ab- rmalities.

This patient was placed on a rigid medical regi- en for ten months, but she had numerous recur- nces of urinary infection. Therefore, a vesico- reteroplasty of the Politano-Leadbetter type was erformed recently. It is too early to assess results.

This case demonstrates vesicoureteral reflux as- ciated with persistent infection, minor calyceal osion and mild renal atrophy.

ASE 3. A 37 year old male complained of re- rrent urinary infections characterized by fever, ills, dysuria and flank pain, for six months. Phy- cal examination showed atrophy of the left tes- cle. The urinalysis was normal. Bacteriuria was t present. Cystourethrography showed marked ft vesicoureteral reflux and a diverticulum of the adder that did not empty. (Fig. 3, A). Excretory ograms showed mild distortion of the left renal llecting system. (Fig. 3, B). Cystoscopy and urethroscopy demonstrated a marked vesical neck contracture with mild trabeculation of the bladder and the presence of the diverticulum. A transurethral resection of the bladder neck was carried out without complications. While the reflux has persisted, he has been free of symptoms and has had no recurrence of infection.

This case demonstrates the association of vesical outlet obstruction, vesicoureteral reflux and recurrent urinary infections.

CASE 4. A 44 year old woman was hospitalized for acute right pyelonephritis. She had had many urinary infections dating back to childhood. She was febrile and appeared to be acutely ill. Urinalysis showed pyuria, microhematuria and bacteriuria. Urine culture produced coliform organisms. A voiding cystourethrogram showed marked vesicoureteral reflux on the right and minimal reflux on the left. (Fig. 4, A). Excretory urograms showed a cluster of calculi in the lower calyx of the left kidney and moderate inflammatory changes in both kidneys. (Figs. 4, B and 5). There was questionable bilateral loss of renal substance. Cysto-

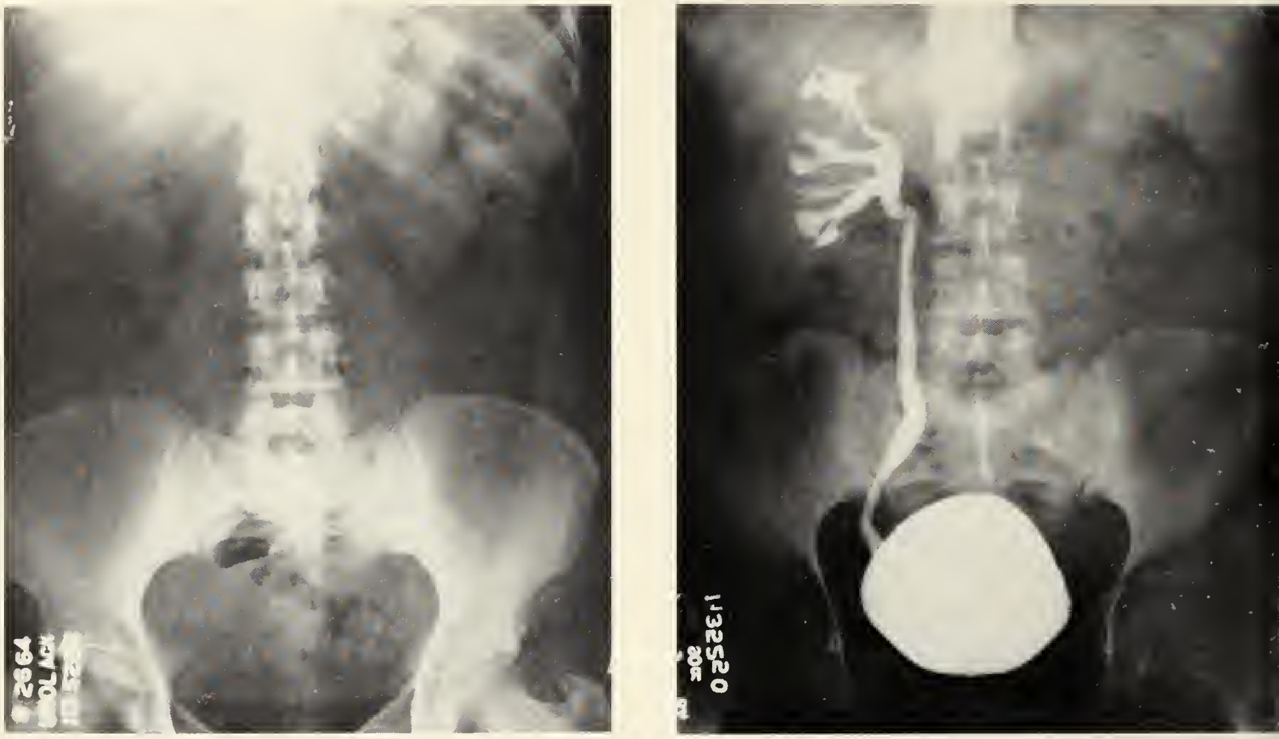


Fig. 4. Case 4. A, at left: Plain film shows calculi in left lower poll calyx. B, at right: Cystogram show marked right and minimal left vesicoureteral reflux.

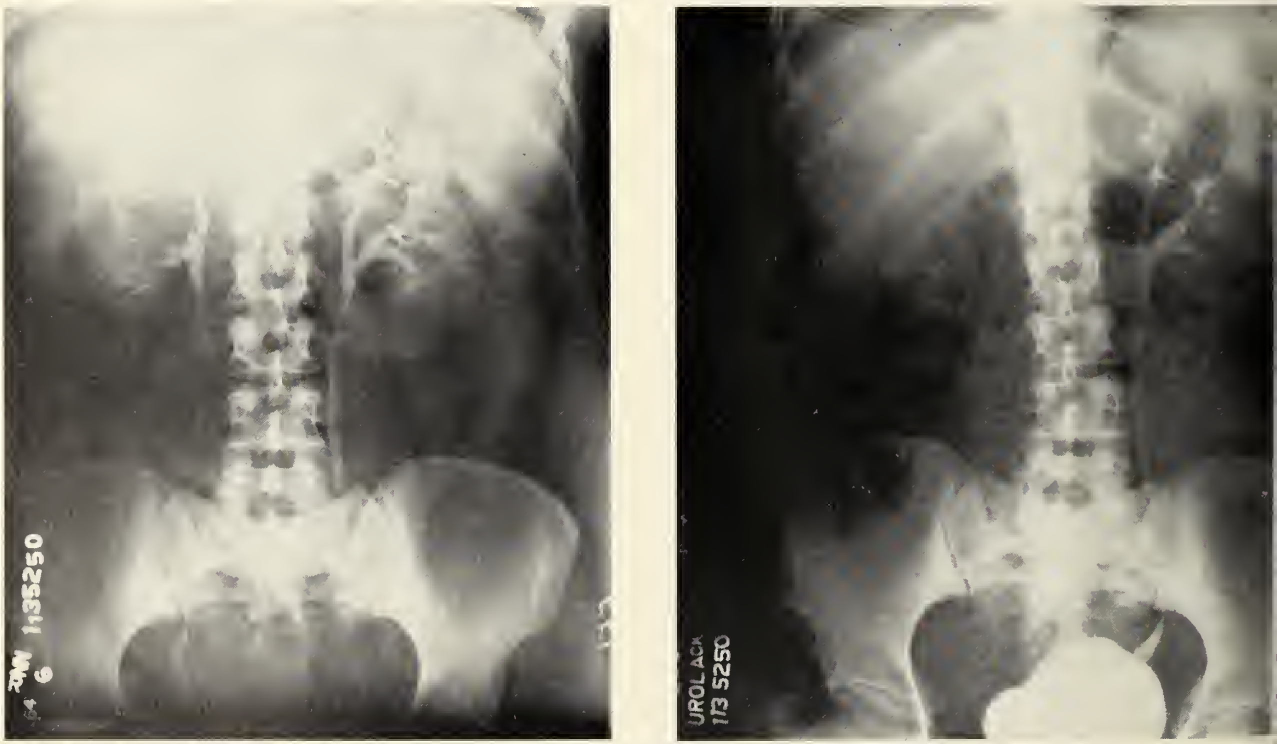


Fig. 5. Case 4. A, at left: Excretory urograms demonstrate inflammatory changes. B, at right: Cystogram after right vesicoureteroplasty shows increased reflux on the left.

scopy showed both ureteral orifices located high in the bladder. The right orifice was patulous.

A right vesicoureteroplasty for reflux was done by the method described by Lich. She has since had increased reflux on the left although there is none on the operated right side. (Fig. 5, B).

This case shows the association of reflux, infection, calculous disease, and equivocal evidence of renal atrophy.

CASE 5. A 26 year old woman was hospitalized with an acute recurrence of long standing urinary infection that had been present for at least eight years. Two-and-one-half years earlier, excretory urograms had shown the left kidney to be smaller than the right, with calyceal distortion and narrowing of the upper pole infundibulum. A cystourethrogram at that time had demonstrated a diverticulum on the right side of the bladder and right vesicoureteral reflux. Cystoscopy had shown chronic cystitis without evidence of obstruction. She was subsequently hospitalized in another hospital where a left nephrectomy had been done. She had continued to have reccurrences of infection and was repeatedly hospitalized. She was often treated with urethral dilations. On her last admission physical examination showed no contributory abnormalities. Urinalysis and urine culture were negative, which was not surprising since she had been on suppressive antibacterial therapy. Blood urea nitrogen and serum creatinine were normal. Repeat cystography showed no change with the persistence of right vesicoureteral reflux and the bladder diverticulum. (Fig. 6, A). A large residual urine was noted. Excretory urograms showed no gross changes in the remaining right kidney. (Fig. 6, B). The urethra calibrated to F #30 with ease with bougies. A cystometrogram confirmed a large bladder capacity with a low voluntary voiding pressure and a large residual urine. Definite neurologic disease was never established.

Even after comprehensive evaluation, the nature of this patient's illness remained elusive. A vesicoureteroplasty of the Politano-Leadbetter type and a V-Y plasty at the vesical neck eliminated the reflux, but did not eliminate the infections, and she persists in having residual urine that defies medical management. It is possible that she could represent the adult end product of untreated megacystic syndrome.

CASE 6. A 31 year old diabetic woman presented with a history of repeated urinary infections for eight years. Physical examination was unrewarding. The urine showed no significant abnormalities and bacteriuria was not present. In the past, however, repeated cultures had been positive. A cystourethrogram had shown transient right vesicoureteral reflux. (Fig. 7, A). An earlier excretory urogram had shown right renal atrophy. (Fig. 7, B). She had been placed on Mandelamine and

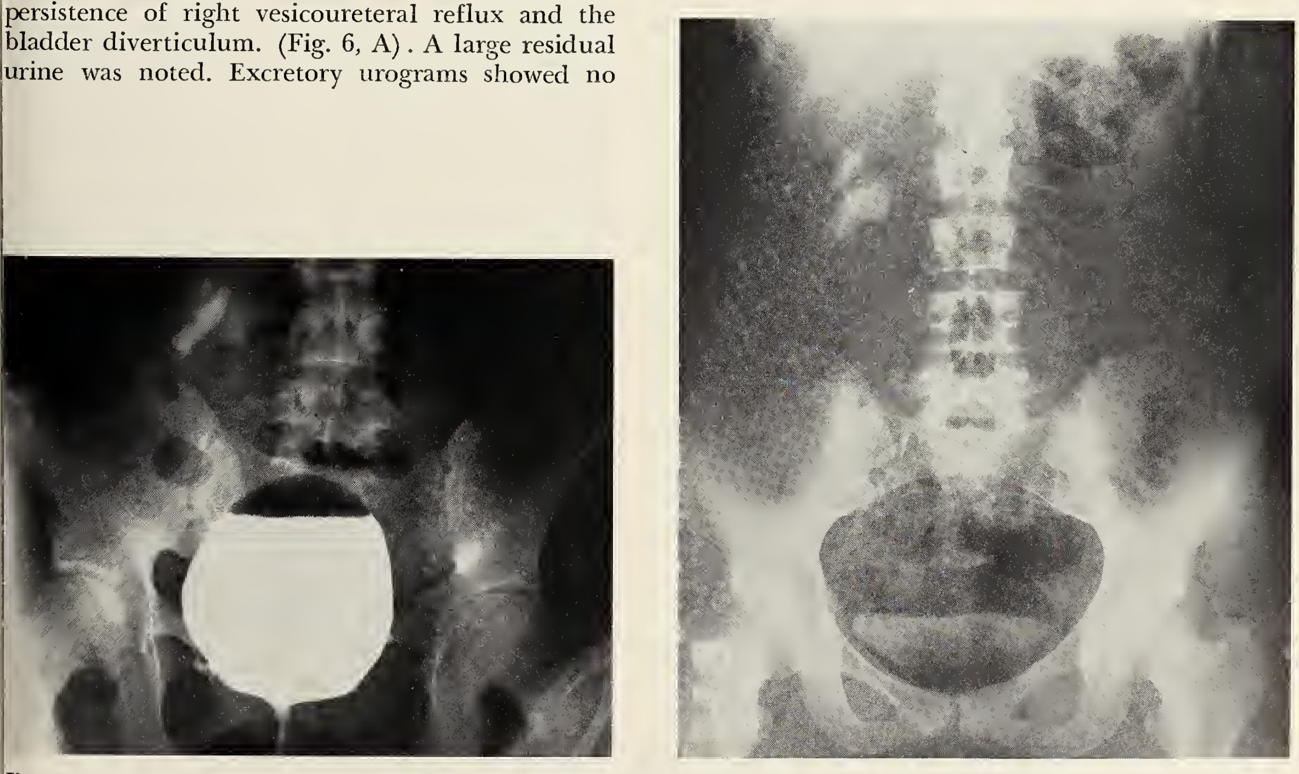


Fig. 6. Case 5. A, at left: Cystourethrogram shows a small bladder diverticulum and right vesicoureteral reflux. B, at right: Excretory urogram shows slight changes in the right kidney.

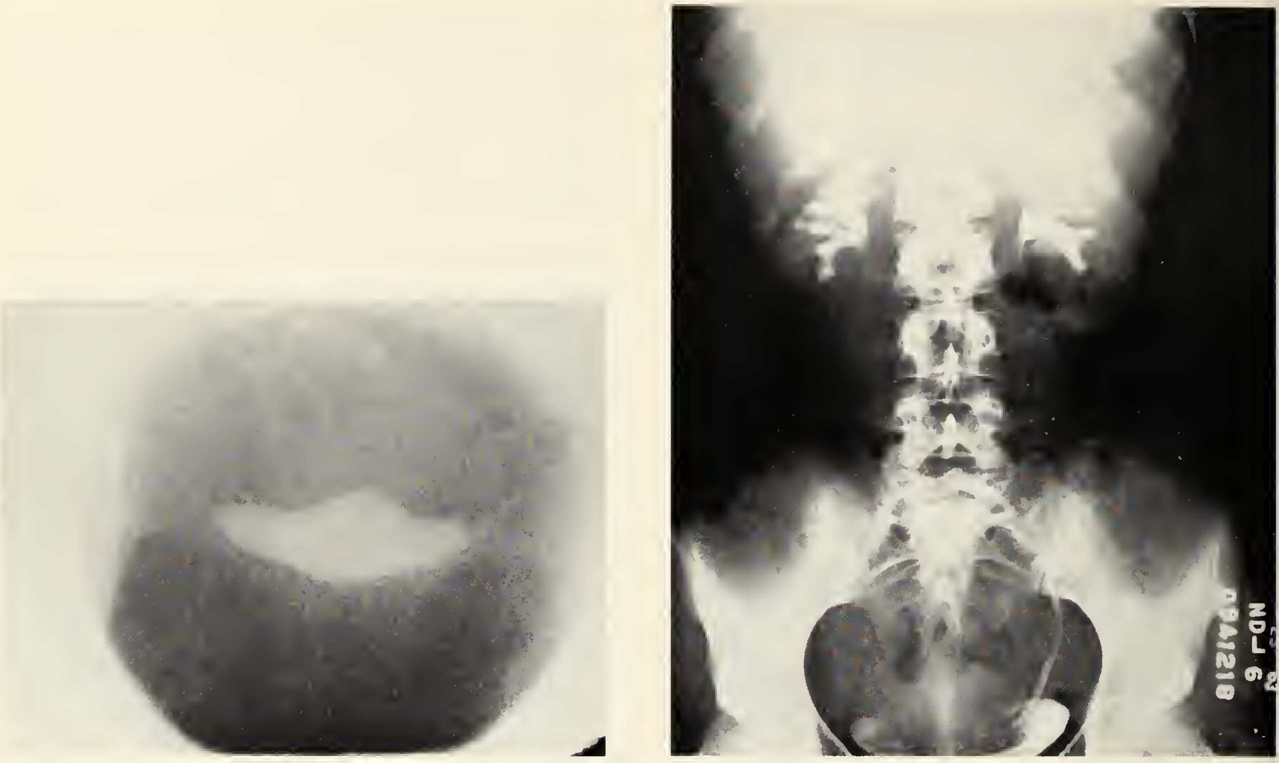


Fig. 7. Case 6. A, at left: Cystourethrogram shows slight right vesicoureteral reflux. B, at right: Excretory urogram shows marked renal atrophy on the right.

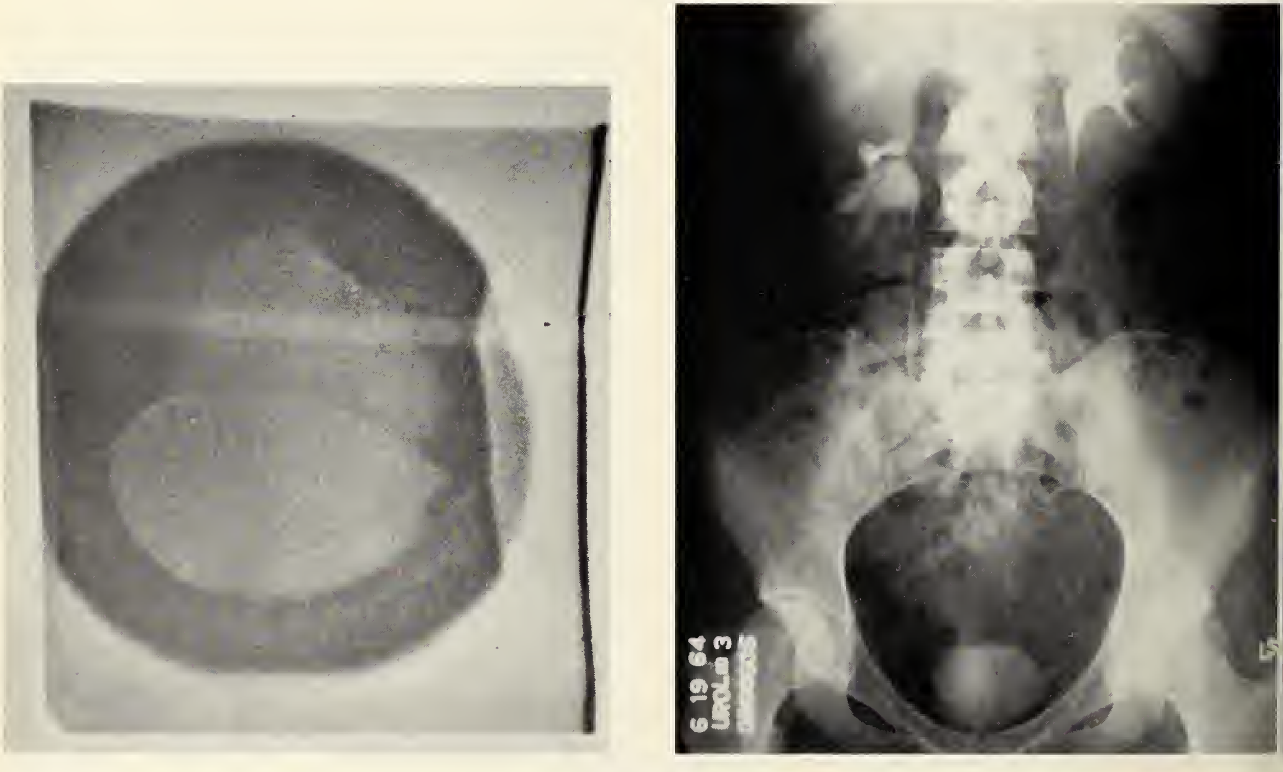


Fig. 8. Case 7. A, at left: Cystourethrogram shows bizarre bladder configuration and left vesicoureteral reflux. B, at right: Excretory urograms. Note sacral anomaly.

Methionine before being seen in our department. Her urine remained abacteriuric on this program, and a repeat cystourethrogram several months later showed the disappearance of reflux. Her urine remained negative for one year on the drug routine and she was relatively free of symptoms. She has failed to keep her appointments since that time.

This case, if it is assumed that reflux existed for some years before its detection, may perhaps show the roll of reflux in the genesis of renal atrophy. It is interesting that reflux was absent on follow-up studies after control of infection.

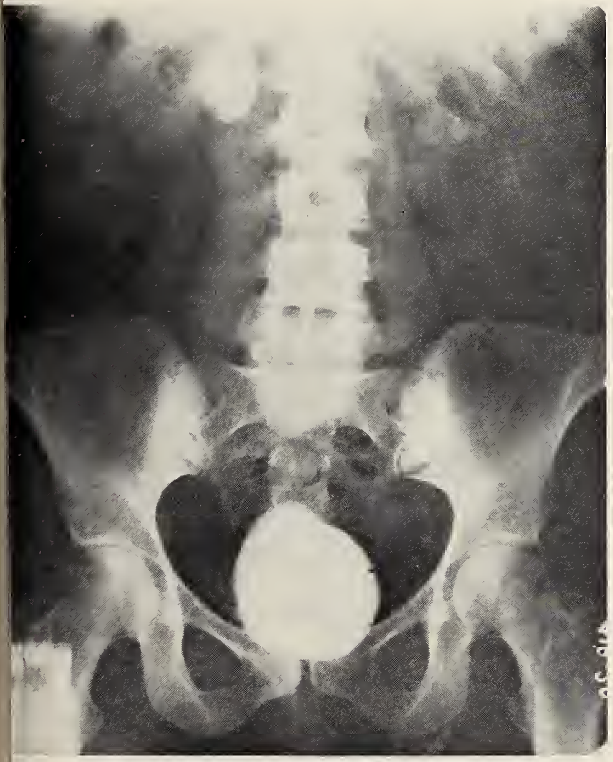
CASE 7. A 22 year old woman was evaluated because of recurrent urinary infections. She had urologic evaluation when she was 12 years old and had been told that her bladder was "partially dead." She had been recently treated with Nitrofurantoin. Physical examination showed poor anal sphincter tone, a diminished clitoro-anal reflex and decreased saddle sensation. Urinalysis showed no significant abnormalities. Bacteriuria was not present although she had had numerous previous positive urine cultures. Blood urea nitrogen and serum creatinine were normal. A cystourethrogram showed a "Christmas tree" configuration of the bladder, marked left vesicoureteral reflux, and transient right vesicoureteral reflux. There was no residual urine. (Fig. 8, A). An anomaly of the sacral spine was present. Excretory urograms were normal. (Fig. 8, B). The urethra calibrated easily at F #26. Cystoscopy and urethroscopy showed moderate trabeculation and cellule formation.

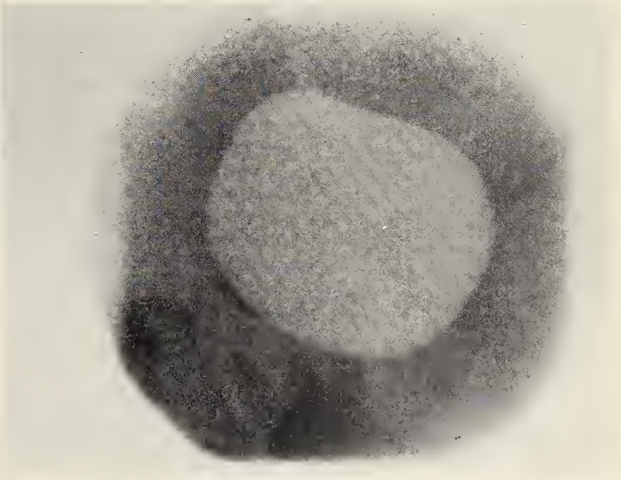
She had been maintained on long term medication with occasional mild exacerbations of her urinary infection.

This case illustrates the development of vesicoureteral reflux and recurrent infection in a patient with an incomplete lower motor neuron neurogenic bladder, secondary to a sacral cord anomaly.

CASE 8. A 32 year old woman presented with a history of back pain for 18 months. Physical examination was not remarkable except for a very marked obesity. Urinalysis showed pyuria and microhematuria. Urine culture produced a few Micrococci that were probably contaminants. Blood urea nitrogen and serum creatinine were normal. A voiding cystourethrogram showed right vesicoureteral reflux and was suggestive of a bladder neck contracture. There was a very large calculus and many smaller calculi in the right renal pelvis and several small calculi in the lower pole calyx on the left. (Fig. 9 A, B). There was bilateral pyelocaliectasis and ureterectasis. (Fig. 10). Endoscopy and cystoscopy showed marked trabeculation of the bladder. Intensive metabolic evaluation for predisposing factors was unrewarding.

In the past three years this patient has had two right pyelolithotomies, a resection of the lower pole of the left kidney and a transurethral resec-





ig. 9. Case 8. A, at left: Cystogram shows a trabeculated bladder and bilateral renal calculi. B, at right: oiding Cystourethrogram shows right vesicoureteral reflux and suggests bladder neck obstruction.

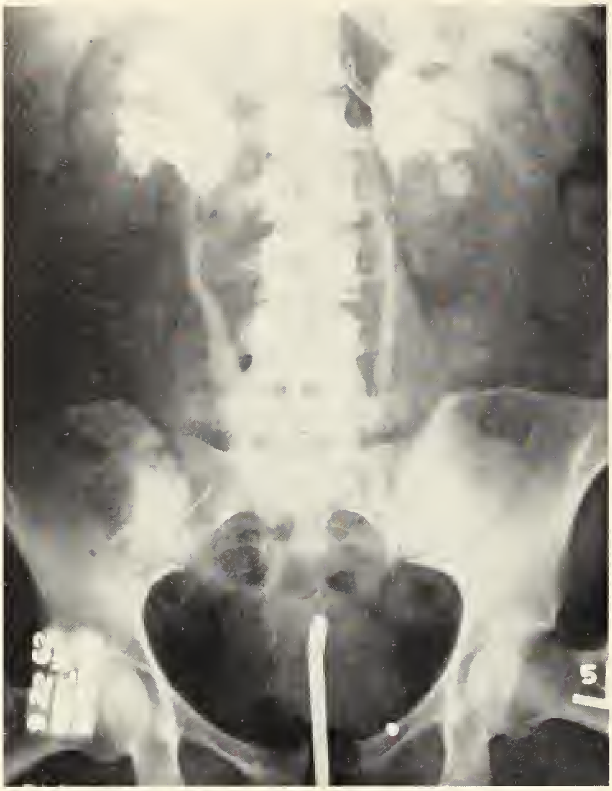


Fig. 10. Case 8. Urograms show marked bilateral ureteropyelocaliectasis.

tion of the bladder neck. She has been asymptomatic for a year with a low grade bacteriuria that is well controlled by medication.

It is interesting to speculate that this patient's primary disease may have been a bladder neck contracture that produced trabeculation of the bladder, vesicoureteral reflux and ureteropyelocaliectasis with subsequent stasis, infection and calculus formation.

DISCUSSION

It appears that vesicoureteral reflux is less common among adults than among children. Therefore, the results of the pediatric diagnostic battery will less often be rewarding when used in adults. Nonetheless, as some of our cases illustrate, the yield frequently will be among the most trying, frustrating and difficult cases.

We have only briefly alluded to therapy in the presentation of cases and we make no claims for the wisdom or efficacy of the treatment used. At the present time, there is no massive body of background knowledge to rely upon in the management of vesicoureteral reflux in adults. The natural history of the mature kidney subjected to vesicoureteral reflux may well differ greatly from the natural history of the immature kidney of a child under similar circumstances.

The primary purpose for using the complete diagnostic protocol in indicated cases among adults is to arrive at a precise diagnosis. However, until this type of evaluation is used routinely in specific situations, the mechanisms of disease will not be appreciated. Until many of these patients have been followed for long periods of time, the natural course and the pathogenesis of disease will not be understood. Only after this knowledge has been acquired, will therapy be placed on an entirely rational basis.

SUMMARY

In recent years, a standard pediatric diagnostic protocol including voiding cystourethrography and calibration of the female urethra has met wide acceptance. Clinical research and experience now suggest that this same protocol should be used routinely for urologic diagnosis among adults when proper indications are present. The use of this battery of studies is rewarding in arriving at a precise diagnosis, in establishing the natural history of genitourinary diseases, and in developing knowledge upon which to base rational therapy.

BIBLIOGRAPHY

1. Williams, D. I., and Woodard, John R.: "Problems in the Management of Ectopic Ureteroceles". J. Urol., 92:635, 1964.
2. Hutch, J. A., Miller, E. R., Hinman, F., Jr.: "Perpetuation of Infection in Unobstructed Urinary Tracts by Vesicoureteral Reflux". J. Urol., 90:88, 1963.
3. Hutch, J. A.: "The Role of the Ureterovesical Junction in the National History of Pyelonephritis". J. Urol., 88:354, 1962.
4. Hinman, F., Jr., and Hutch, J. A.: "Atrophic Pyelonephritis from Ureteral Reflux without Obstructive Signs" (Reflux Pyelonephritis). J. Urol., 87:230, 1962.
5. Hutch, J. A., Hinman, F., Jr., and Miller, E. R.: "Reflux as a Cause of Hydronephrosis and Chronic Pyelonephritis". J. Urol., 88:169, 1962.
6. Hutch, J. A., and Tanagho, E. A.: "Etiology of Non-Occlusive Ureteral Dilation". J. Urol., 93:177, 1965.
7. Hutch, J. A., and Bunts, R. C.: "The Present Status of the War-time Paraplegic". J. Urol., 66:218, 1951.
8. Hutch, J. A.: "Vesico-ureteral Reflux in the Paraplegic: Cause and Correction". J. Urol., 68:457, 1952.
9. Bruce, A. W., and Awad, S. A.: "Reflux in the Residual Ureter". J. Urol., 92:278, 1964.

ORIGINAL
SCIENTIFIC
ARTICLE

Uterine Rupture in Labor Following Repair For Cervical Incompetence

By S. Leonard Cohn, M.D., F.A.C.O.G.
William S. Floyd, M.D., F.A.C.O.G.
Both of Detroit

Cervical incompetence is recognized as a cause of repeated mid-trimester abortion.[1] The original operative techniques have been repeatedly modified and variations of the circlage have become most popular.[1, 3, 4] The increased fetal salvage of 15 per cent to 70-80 per cent have encouraged many to employ this repair where all the proper criteria of diagnosis have not been fulfilled. The operative procedures are not without hazard and include: post-operative infertility, hemorrhage, amnionitis, premature onset of labor, septicemia, and uterine rupture.

The purpose of this paper is to present three cases of uterine tears during labor following repairs for cervical incompetence.

CASE REPORTS

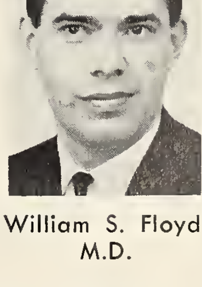
CASE #1: A 24 year old para 0 had two consecutive abortions at six and three months respectively, a funnel cervix radiographically, and a Lash repair performed after the last abortion. She was hospitalized one year later, at 18 weeks gestation, complaining of painless spotting of blood and lower abdominal pressure. An examination revealed an effaced cervix dilated to three centimeters and the amniotic sac bulging to the external os. A circlage procedure using a nylon threaded polyethylene catheter was performed closing the cervix after reduction of the amniotic sac using a 75 cc Foley catheter with the tip removed.

On the 14th post-operative day the patient spontaneously ruptured the bag of waters and precipitously delivered a 20 week fetus. Vaginal bleeding was profuse after delivery. An examination revealed a widely split anterior cervix extending upward to above the base of the bladder through the scar of the previous Lash repair. Because of the uncontrollable hemorrhage, an emergency laparotomy followed by a total abdominal hysterectomy was performed. The 13 x 8 x 6 centimeter uterus revealed a central anterior rupture from the external os extending upward through the lower uterine segment. Microscopically there was an acute, purulent syncitial endometritis, and cervicitis. She required 2500 cc of blood.

CASE #2: A 32 year old gravida VIII, para III, abortus IV was admitted to Sinai Hospital of Detroit in 1954 and 1956 for repeated incomplete abortions at four months gestation requiring dilation and curettage. Her previous history included a full term vaginal delivery with the first pregnancy in 1952, five month abortion of twins in 1953 and seven month premature delivery in 1955. Following the last miscarriage in 1956 a Lash tracheloplasty was performed.

Co-authors

S. Leonard Cohn, M.D.



William S. Floyd, M.D.

Doctor Cohn is Instructor, Clinical Obstetrics and Gynecology, Wayne State University School of Medicine; Doctor Floyd is Assistant Professor of Obstetrics and Gynecology, Wayne State University School of Medicine. The paper is based on cases at the Department of Obstetrics and Gynecology, Sinai Hospital, Detroit.

Cervical incompetence is recognized as a cause of repeated midtrimester abortion. The original operative techniques have been repeatedly modified in favor of the circlage type. The operative procedures are not without hazard. The three cases presented are an example of one complication, uterine rupture through a past Lash repair after a secondary circlage.

In March of 1958, at 14 weeks gestation, the patient had uterine irritability and slight vaginal spotting. A brief period of hospitalization with bed rest and progesterone therapy was carried out. The patient was discharged home in good condition and returned at term in active labor, she was delivered spontaneously of a 5 pound 4 ounce infant over a mediolateral episiotomy. The third stage of labor was completed in five minutes. Inspection of the cervix revealed an 8 centimeter laceration of the anterior lip extending through the entire length of the previous Lash repair. The defect was closed with chromic 00 catgut sutures. The patient had a smooth convalescence.

CASE #3: A 29 year old gravida VI, para II had previously experienced four spontaneous abortions in the late first trimester. She had a Lash operation for cervical incompetence in 1953. In 1955 she delivered a live term 4 pound 9 ounce infant.

In a latter pregnancy she was admitted with mild uterine contractions and 1 centimeter cervical dilatation. An intravenous solution containing oxytocin (8 minims) in 500 ml. of 5% dextrose was started. Within two hours and fifty minutes she delivered a 6 pound 12½ ounce infant from the OLA position with outlet forceps over a left mediolateral episiotomy under a pudendal block supplemented by nitrous oxide and oxygen. Examination revealed a cervical laceration at the site of operation at 12 o'clock extending up to the bladder area. A primary closure was accomplished with mattress chromic 00 catgut sutures. The patient subsequently did well.

CONCLUSIONS

A description of the "true internal cervical os incompetence syndrome" would be the repeated, painless, passive progressive effacement and dilatation of the pregnant cervix during the middle trimester.

The defect in the incompetent cervix is at the level of the internal cervical os with the loss of integrity of the internal sphincter. In performing the Lash procedure one is doing an anterior or anterolateral vaginal hysterotomy with excision of the weakened area. In deciding the management of a subsequent pregnancy the above fact must be kept in mind, analogous to the situation in contemplating vaginal deliveries following previous vertical Cesarean section or myomectomy. The circumferential suture may prevent normal effacement and dilatation of the cervix. In our cases the forces of labor were directed to the uterine walls with the resultant uterine rupture through the area of least resistance of the previous Lash scar.

These cases represent one of the several hazards obstetricians encounter in repair of the incompetent cervix. A thorough understanding of the patho-physiology, indications, contra-indications and management of the incompetent internal cervical os is necessary before one should undertake the operative approach if a successful result is to be achieved.

SUMMARY

Uterine rupture during pregnancy following the Lash repair and subsequent circlage are reported in 3 cases. A discussion of the mechanisms involved is offered with some comments on prevention and management.

BIBLIOGRAPHY

1. Shirodkar, V. N., A New Method of Operative Treatment for Habitual Aborters in the Second Trimester of Pregnancy. Antiseptic, 52:299, 1955.
2. Barter, R. H., Dusabek, J. A., Reva, H. L., and Parks, J., Surgical Closure of the Incompetent Cervix During Pregnancy. Am. Journal of Obst. & Gynec., 75:511, 1958.
3. Shettles, Landrum, Cervical Factors in Reproduction. Obst. & Gynec., 14:635, November 1959.
4. Easterday, Charles; Land, Reid; Duncan, E., The Incompetent Cervix in Repetitive Abortion and Premature Labor. New England Journal of Medicine, 260:687, 1959.

ORIGINAL SCIENTIFIC ARTICLE

Hepatomegaly With Progressive Liver Failure In Afghanistan

A PRELIMINARY STUDY

By Robert G. Axelrod, M.D.
Mildred A. Axelrod, M.D.
Both of Oak Park, Michigan, and
Ali Ahmad Hashimi, M.D.
Mohammad Omar Wardock, M.D.
Both of Kabul, Afghanistan

INTRODUCTION

Afghanistan, as it emerges into the twentieth entury, presents to the Western physician many problems which beg solution.

In this country where ancient village medicine exists uneasily beside modern city methods, taboo, superstition and fear impede medical progress at almost every step. Yet, despite the frustrating lack of adequate laboratory facilities, post mortem studies and communication for out-patient follow-up, preliminary projects were initiated.

Among the many challenging medical problems encountered in Kabul, Afghanistan is hepatomegaly with progressive liver failure. It is an intriguing problem because of its unusual character. The clinical pattern of this syndrome differs in several respects from that reported in European and American literature. Because of the age range and fulminant character of this disease, it more closely resembles the pattern of cirrhosis of the liver seen in India, China and the Middle East.[1, 2, 3] It also resembles this pattern in the dietary history and the attendant malnutrition. As in the Middle East, alcoholism was conspicuous by its absence.[3] A similar epidemiologic pattern was found in the study of autopsied adults in New York, East Africa and West Africa where cirrhosis of the liver was found to be more common among Africans than among New Yorkers under the age of 40 years.[4]

The clinical course of the young patients in Afghanistan with hepatomegaly and liver failure followed several distinct patterns. The first group remained well without clinical evidence of liver failure for several weeks to months, then progressively deteriorated. In this group intractable ascites became a serious problem. These patients finally succumbed to alternating periods of improvement and deterioration eventually dying of liver failure and gastrointestinal hemorrhage. In another group liver failure developed rapidly with death ensuing in two to three weeks. The age range in those patients in whom the diagnosis was established by liver biopsy was 18-45 years. Clinical cirrhosis of the liver, however, was diagnosed in patients from 8-50 years of age.

All patients studied were male. No attempt, however, was made to determine sex predilection. Examination of female patients in the Out-Patient

Co-author

Robert G. Axelrod, M.D.

From the Department of Medicine, Avicenna Hospital, Kabul, Afghanistan, under the auspices of MEDICO, a service of CARE. Clinical Instructor, Department of Medicine, Wayne State University School of Medicine, Detroit and former co-Chairman, Department of Medicine, Avicenna Hopital, Kabul, Afghanistan (Dr. R. Axelrod and Dr. M. Axelrod); Fellow in Infectious Disease, Department of Medicine, Detroit Receiving Hospital (Dr. Hashimi); Resident, Department of Medicine, Avicenna Hospital, Kabul, Afghanistan (Dr. Omar).

EDITOR'S NOTE

This paper on liver disease as seen in Afghanistan may seem esoteric to some of our readers. The editor found the paper both instructive and interesting and commends the authors on their honesty in recognizing the many unanswered questions. It also points out the probable importance of diet, environment and other factors leading to chronic liver disease. It is difficult to escape the implication that these findings can be applied to people in our own country.

Clinic was made difficult by local taboos and religious restrictions. That liver failure was a disease of young persons was determined by outpatient and hospital admissions; but its illusive predilection for males reflects the reticence of females to submit to examination.

Many diseases are endemic in Kabul, Afghanistan. Stool and blood studies in each patient helped to rule out parasitic and bacterial diseases which might cause hepatomegaly with liver failure. The extremely high incidence of tuberculosis suggests the possibility of such an involvement of the liver. The absence of a nodular liver, fever, and evidence indicative of active parenchymal tuberculosis elsewhere suggested that the hepatomegaly was unrelated. No liver biopsy revealed caseous necrosis or epithelioid granulomas. The possibility of concommitant disease, however, cannot be rejected. Patients with carcinoma of the liver, primary or metastatic, echinococcus disease, amebic hepatitis and amebic liver abscess were excluded from this study despite the fact that concommitant cirrhosis of the liver may have been present.

In the patients studied with hepatomegaly and progressive liver failure no single etiological common denominator revealed itself. In many, malnutrition was the primary problem. Other patients alleged good nutritional histories. Others acknowledged a previous jaundice with and without adequate nutritional history. The etiology of cirrhosis of the liver in Afghanistan can be found, perhaps, in the combination of several factors.

The importance of diet in the etiology of liver disease is well documented.[5, 6, 7, 8, 9, 10, 11, 12, 13] A dietary history was secured from all patients. In the exceedingly poor of Afghanistan, which encompasses the vast majority of the population, the basic diet consists of sugared tea with a wheat bread. In the more fortunate who can afford a broader diet, the food is increased in bulk, but not appreciably in nutriment. For the more fortunate rice is a staple of the Afghan diet, as is occasional lamb and vegetables. Dairy products are rarely consumed.

Food taboos may be imposed upon patients by the elder of a particular community. This produced disastrous results in several of our patients. One young patient was prohibited from eating meat for three years in the interests of bettering his health. He was admitted to the hospital with severe malnutrition, marked hepatomegaly and progressive liver failure. Alcoholism in this predominantly Moslem country is a rarity. A history of alcoholism was obtained in none of the patients with cirrhosis of the liver in this study.

Parenteral injections must be considered as a possible hazard and cause of jaundice in the general population. The popular appeal for injections in lieu of tablets, and the promiscuous use of parenteral drugs, such as penicillin, vitamin C and calcium gluconate, undoubtedly has led to homologous serum jaundice in many patients.

Hepatitis in both sporadic and epidemic variety is very common. The combination of crowded homes, inedaquate toilet facilities, improper sewage disposal, constant insect contamination of food with endemic hepatitis may well account for the marked prevalence of this disease in Afghanistan.

Malnutrition and anemia were prominent in most patients with cirrhosis of the liver. Worm infestations, enteritis, and malnutrition were felt to be most responsible for the anemia. Intercurrent infection also played a major role in the development of anemia. In none of the patients in this preliminary study did clinical findings suggest the syndrome of Zinc deficiency as described by Prasad.[14] Although no accurate statistic is available in Afghanistan, the incidence of tuberculosis in the hospital population in-patient group varied from 85 to 90%. In the patients of this particular study, however, no evidence of active, parenchymal tuberculosis was found.

DISCUSSION

Clinical and pathologic studies from different geographic regions of the world suggest that cirrhosis is a common disease, and that hepatitis with or without jaundice commonly preceeds cirrhosis.[15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27] Often, despite the absence of a history of previous jaundice, a postnecrotic cirrhosis is revealed by liver biopsy. This suggests that a previous hepatitis without jaundice may have preceeded the development of cirrhosis.[19]Often there is a prolonged period between the initial hepatitis and the subsequent development of cirrhosis. The initial hepatitis may be so mild clinically as to escape detection. Smetana[28, 29] believes that postnecrotic cirrhosis is the 'result of healing and repair of destroyed parenchyma after a single, severe, near fatal injury to the liver produced by viral hepatitis". As early as 1923 Minot[30] indicated that acute hepatitis might progress to cirrhosis. Later, studies suggested that the cirrhosis which follows acute infectious hepatitis and homologous serum jaundice is usually postnecrotic in type.[17, 25] That cirrhosis can follow viral hepatitis has also been reported by other authors.[18, 22, 24, 31]

Cirrhosis in children is often associated with a family history of involvement of the siblings. In these cases, postnecrotic cirrhosis may occur in several members of one family because they are affected simultaneously by acute infectious hepatitis.[26, 27] This sequence of events has particular relevance to the epidemiologic patterns noted in Kabul, Afghanistan. It is rare, indeed, that housing is not overcrowded, and that infectious disease involves but one person of the entire household.

Despite the above studies, however, the relationhip of cirrhosis to infectious hepatitis is not reolved. In several large series of cases, infectious hepatitis was not listed among the etiological facors of Laennec's or portal cirrhosis.[32, 33, 34, 35, 36] n other studies of cirrhosis of the liver hepatitis varied in incidence from 1.4-13% as antecedent to cirrhosis.[15, 21] Baggenstoss[16, 37] compared 43 autopsied cases of "alcoholic", or Laennec's cirrhosis with 43 cases of "post hepatitic" cirrhosis. The latter group revealed histories which suggested infectious hepatitis as the causative factor. This latter group, in general, were younger and were predominantly females. The former group generally were older and predominantly males. Hepatic insufficiency was the most common cause of death in both groups.

The relationship between viral hepatitis and cirrhosis, therefore, remains unsettled. Perhaps, a small proportion of patients with severe hepatitis subsequently develop necrosis which heals with scars and large regenerating nodules. This development can then be designated as postnecrotic cirrhosis. The resemblance of the initial or primary illness to acute infectious hepatitis, and its occurrence sometimes during epidemics of hepatitis, and in parts of the world where the disease is endemic,[38] strongly suggests that at least some cirrhosis with this morphologic pattern may follow viral hepatitis.

The cirrhosis which follows viral hepatitis may be dependent not only upon the acute viral disease, but upon protein malnutrition. Both fatty liver and cirrhosis in animals, such as rats and monkeys, have been produced by the feeding of a deficient diet.[39, 10, 12] This is true of the cirrhosis and fatty liver of alcoholics, and of Kwashiorkor. Kwashiorkor is a disease of infants and young children, caused primarily by protein malnutrition, being first described by Williams in 1933.[40] It appears to be completely reversible, either by treatment, or when the child's diet becomes more varied, and when the child's growth rate diminishes.[41, 42]

In 1954 Popper and Shaffner[11] suggested three mechanisms which can produce nutritional injury to the liver. (1) Under-nutrition or starvation; (2) Specific deficiency of one dietary constituent; (3) Malnutrition (imbalanced nutrition). Caloric under-nutrition (starvation) and deficiency of individual food constituents seemed less important than dietary imbalance or malnutrition. The main result of malnutrition, according to the authors, is the fatty liver-cirrhosis syndrome similar to that found in alcoholics in the geographic temperate zone. Of 84 patients studied in the laboring class in China, Yang[2] found that over 70% subsisted on coarse, carbohydrate foods. Rao[1] found that the diet of patients with cirrhosis of the liver in Southern India was deficient in proteins, fat and vitamins, especially A, C, and D. The study by Yenikomshian[3] on non-alcoholic cirrhosis of the liver in Lebanon and Syria revealed that the patients lived on a diet chiefly of bread and legumes, poor in protein and vitamin A.

For Your Library

Copies of "A Century of Service in Medicine," published as a Centennial highlight by MSMS, are still available for cost, $2.00. The book, bound handsomely in blue, was written by Wm. J. Stapleton, Jr., M.D., of Detroit, the MSMS Historian. To obtain a copy, write to MSMS, 120 West Saginaw, East Lansing, and enclose a check.

> ***"Hepatomegaly with progressive liver failure is a serious and common medical problem in Afghanistan today. It is most frequently seen in the young adult. This condition resembles the epidemiologic pattern of Cirrhosis of the liver reported in India and in the Middle East. This preliminary report suggests that malnutrition and prior Hepatitis are significant contributory factors in the development of progressive liver failure."***

Although experimental, nutritional cirrhosis and human, Laennec's cirrhosis may not be the same disease, the analogy is very close. It is clear, however, that dietary deficiency is a primary etiologic factor in Laennec's cirrhosis.[5, 43, 42] Cirrhosis of the liver has been produced experimentally by diets low in casein and methionine.[6, 7, 8, 10, 39] The lesions that could be produced in the liver by specific dietary deficiencies were prevented by the addition of lipotropic substances to the deficient diets thus indicating the specific role of malnutrition in the production of this disease.[5, 42, 43, 44]

RESULTS

With the limited facilities available at the Avicenna Hospital in Kabul, Afghanistan, a preliminary attempt was made to define the problem of hepatomegaly and liver failure in young adults. This attempt required a detailed historical account of previous illnesses, previous injections and dietary pattern. The hospital course of the patient was followed by daily clinical appraisal and simple laboratory evaluation. The problems which arose from the difficulty in obtaining permission for post-mortem study (refused because of social taboo) were partially overcome by the ease with which permission for liver biopsy was obtained.[*] In those patients in whom there was no contraindication a liver biopsy was performed. Because of meager laboratory facilities patients were carefully selected. Both abdominal and transthoracic approaches were used. No complications resulted from this procedure.

An attempt at out-patient follow-up was made in order to determine the clinical course of the disease. This, however, was beset with many difficulties such as poor communication, inadequate or no charting of out-patients, and the desire of the very ill patient to return to his village to die.

The following are brief accounts of representative cases.

ILLUSTRATIVE CASE REPORTS

CASE 1: Age 27, male. Ethnic group: Hazara (Mongoloid). History: Severe malnutrition. No previous jaundice. Diet: tea and bread. Salient clinical findings: pain right upper quadrant with severe weight loss, diarrhea, minimal ascites. Liver 8 cm. below the right costal margin. Spleen 2-3 cm. below the left costal margin; both firm, smooth, sharp border. Liver biopsy: Necrosis with fatty degeneration resembling post necrotic hepatitis. Clinical course: progressive decompensation. Death in liver coma.

CASE 2: Age 16, male. Ethnic group: Hazara. History: Jaundice one to two years prior to admission. Diet: tea and bread. Salient clinical features: Liver 6 cm. below right costal margin; firm, smooth, non-tender, sharp border. Ascites, leg edema, pain right upper quadrant, low grade fever. Severe weight loss. Liver biopsy: fatty metamorphosis of the liver. Clinical course: sudden development of hematemesis, shock and death.

CASE 3: Age 18, male. Ethnic group: Pushtun (Indoeuropean). History: adequate nutrition; adequate nutrition in the past. Malaria as a child. No previous history of jaundice. Salient clinical features: Liver 4 cm. below right costal margin, firm with moderate nodularity. Spleen not palpable. Minimal ascites. Liver biopsy: Fatty metamorphosis. Clinical course: Bedrest, good nutrition; the ascites disappeared. The patient was discharged from the hospital improved.

CASE 4: Age 31, male. Ethnic group: Pushtun. History: Severe malnutrition. Jaundice 5 years prior to admission. Diet: tea and bread. Salient clinical findings: Liver 8 cm. below the right costal margin, smooth, firm, sharp border. Moderate ascites. Scrotal edema. Leg edema. Liver biopsy: postnecrotic cirrhosis with areas of regeneration. Clinical course: despite adequate diet, supplemental therapy, and diuretics, the patient showed no change. He was discharged from the hospital unimproved.

---

[*] Tissue microscopy was accomplished through the cooperation and advice of Gordon Hadley, M.D., Pathologist (WHO) Department of Pathology, Kabul Medical School. Slides remained the possession of the Kabul Medical School.

CASE 5: Age 22, male. Ethnic group: Pushtun. History: Jaundice as a child. Diet: tea, bread and occasional meat. Salient clinical findings: liver 2 cm. below right costal margin; firm, non-tender, sharp border. Moderate ascites with ankle and scrotal edema. Severe anemia. Marked weight loss. Liver biopsy: Postnecrotic cirrhosis. Clinical course: Gradual but progressive liver failure. Discharged from the hospital in impending coma.

CASE 6: Age 20, male. Ethnic group: Hazara. Patient entered with jaundice, diarrhea, bright red blood in the stool due to severe hemorrhoidal bleeding. No previous jaundice. Diet: tea, bread and meat 1-2 times weekly. Liver 6 cm. below the right costal margin. Firm and smooth with a sharp border. Spleen one cm. below the left costal margin. Minimal ascites. 2+ ankle edema. Twenty-five days after the disappearance of the jaundice with a persistently enlarged liver, a liver biopsy revealed postnecrotic cirrhosis with fatty degeneration. Clinical course: Ascites gradually increased. The patient was discharged with clinical evidence of severe and progressive liver decompensation.

CASE 7: Age 26, male. Ethnic group: Uzbeck. Past History: Severe malnutrition. Diet: tea and bread. Apparently for three years prior to admission the patient was told not to eat meat. Salient clinical findings: Thin and severely malnourished with pain in the right upper quadrant. Slightly tender liver, 4 cm. below the right costal margin with minimal nodularity, but a sharp border and firm. Spleen was enlarged 3 cm. below the left costal margin. Minimal ascites. No ankle edema. Liver biopsy: Fatty metamorphosis. Clinical course: With adequate nutrition and bed rest, ascites diminished and patient showed general improvement. He was discharged from the hospital improved.

CASE 8: Age 41, male. Ethnic group: Hazara. History: Jaundiced three years prior to admission. Salient clinical findings: Ascites; liver 6 cm. below the right costal margin. Ankle edema, weakness, anemia, and slight fever. Ascariasis present. Liver biopsy: postnecrotic cirrhosis. Clinical course: Progressive liver decompensation with death.

CASE 9: Age 45, male. Ethnic group: Pushtun (Mullah). Jaundiced two months prior to admission. Diet: adequate. Gradual development of ascites. Liver 4 cm. below the right costal margin. Ankle edema. Scrotal edema. A rapid development of hepatic insufficiency. Liver biopsy: postnecrotic cirrhosis. Clinical course: Death, three months following admission to the hospital in liver coma.

CASE 10: Age 23, male. Ethnic group: Hazara. Past History: Adequate nutrition with no history of jaundice previously. Patient revealed progressive liver decompensation and was admitted in impending liver coma. Liver 4 cm. below the right costal margin. Minimal ascites. Pain in the right upper quadrant and spleen 1 cm. below the left costal margin. Liver biopsy: Postnecrotic cirrhosis with fatty metamorphosis. Clinical course: Rapid liver failure and death.

SUMMARY

Hepatomegaly with progressive liver failure is a serious and common problem in Afghanistan today. It is found most frequently in the young adult. The epidemiologic pattern of this condition resembles that of cirrhosis of the liver reported in India and the Middle East. This preliminary report suggests that dietary inadequacy and prior hepatitis are profound contributory factors in the development of progressive liver failure. Ten representative case histories are presented. Additional study of this problem is essential in order to arrive at a program whereby preventive as well as therapeutic approaches to this serious problem can be developed.

REFERENCES AVAILABLE

Copies of an extensive list of 44 references may be obtained from MSMS, 120 West Saginaw, Lansing, Michigan, by interested members.

By Patronizing

Our Advertisers

You Help Support

MICHIGAN MEDICINE

WSU Grant to Speed Basic Science Building

The largest single grant in the history of Wayne State University will help speed the start of construction on the $22.5 million WSU Basic Science Building in the Detroit Medical Center.

The new building will house the School of Medicine departments of anatomy, physiology, pharmacology, biochemistry, microbiology and pathology, as well as administrative and service facilities.

WSU received its biggest grant, $4,667,000, from the U.S. Public Health Service in late September.

Ernest Gardner, M.D., dean, said that an additional federal construction grant has been sought from the educational facilities branch, Bureau of State Services.

"This was approved but the award has not been announced," he said. "The total request, research and teaching facilities, amounts to somewhat more than $11.5 million. The State Legislature has indicated that the university may expect about $12 million to be appropriated toward the total cost of the building.

LIST U-M CONTINUING EDUCATION PROGRAMS

The Department of Postgraduate Medicine at the University of Michigan has announced the following courses for Michigan physicians on a continuous basis:

November 3–4—The Management of Common Emotional Problems in Family Practice

November 7–8—Clinical Neurology

November 17–18—Bio-mechanics in Clinical Practice

December 1–3—Otorhinolaryngology for Generalists

December 3–4—Sodium and Hypertension: Renin, Aldosterone and the kidney

INSURANCE STATISTICS

The number of persons in the United States protected by health insurance provided by all voluntary health insuring organizations as of December 31, 1964 and December 31, 1965.

Type of Coverage	1964	1965
Hospital Expense	151,123,000	156,047,000
Surgical Expense	140,667,000	145,938,000
Regular Medical Expense	108,717,000	112,808,000
Major Medical Expense	47,001,000	51,946,000
Loss of Income	48,171,000	50,804,000

*from Health Insurance Institute, New York City

TIMELY TIP

Buckle down and stay safe. Your chances of being killed in an accident increases five times if you are thrown from the vehicle. Studies show that use of seat belts can eliminate at least one-third of all injuries.—JAMA, Vol. 193, No. 12.

Explain New Regulations On Drug Record Keeping

Effective immediately, barbiturate and amphetamine drugs that are in combination with other non-barbiturate or amphetamine ingredients are not presently covered under the Federal Drug Abuse Control Amendments for record keeping.

However, these drugs in combination with other ingredients are presently covered under the law in respect to the refill provisions of the act—that is, a prescription for a barbiturate or amphetamine in combination with another ingredient may be refilled only five times or up to six months, whichever comes first. The record keeping provisions relative to these drugs have been delayed by FDA order until February 1, 1967.

Several other drugs have been included under the act by FDA order, such as preludin, valmid, doriden, chloral hydrate, methamphetamine. The record keeping provisions apply to these drugs, as well as refill provisions. Further, samples of these drugs that the physician might have are now controlled, and records must be kept of all samples received and dispersed.

Who Controls 'Quality Control'?

Much is made of quality control for brand-named drugs. The question is, who will control the quality if only the generic name is used? The government? Not likely, in view of the many problems it already cannot solve. If the government had to exert quality control over all generically labeled drugs, this would be a fabulously expensive and time-consuming operation. Certainly neither the physician nor the consumer can do it. For some drugs, control is not very necessary, but there are too many for which it is essential and there is no easy way to separate the two groups.—*Irvine H. Page, M.D., in MODERN MEDICINE (34:105), June 6, 1966.*

The Role of The Private Physician And The Laboratory And Epidemiology in The

Control of Infectious Syphilis In Detroit

By Benjamin Schwimmer, M.D.
Detroit

In 1965, 670 cases of primary and secondary syphilis (infectious syphilis) were reported in the City of Detroit. Of this total, 29.7% appeared at the Social Hygiene Clinic, voluntarily seeking treatment; 20.2% were reported by private physicians without prior contact with the Health Department.

Thus, only 49.9% of the total infectious syphilis would have been detected, had the Venereal Disease Control Program been passive in awaiting the appearance of patients at the clinic and awaiting private physician reports. This 49.9% constitutes the source cases on which epidemiology is carried out.

The remaining 50.1% were obtained as follows:

A. 30.5% were obtained by the interview of the source cases for their sex contacts; locating and examining these contacts; and treating the infected contacts. Many cases of infectious syphilis were prevented by treating prophylatically those contacts who were exposed 45 days or less previously. These persons did not show evidence of venereal disease, but the exposure was recent enough (45 days or less) that they could be incubating the infection.

B. 18.8% were reported as a result of the follow-up of reactive tests for syphilis as reported to the health department by all registered laboratories. In 1965, 24,965 reactive or weakly reactive specimens were reported by the public and private laboratories in Detroit.

Records of previously reported and treated cases maintained by the Detroit and Michigan Health Department indicated that no follow-up was necessary on 14,537 of these specimens.

Before receiving any communication from the health department, private physicians voluntarily reported 89 cases of infectious syphilis, 367 cases of latent syphilis and 359 cases of Biological False Positive serologies.

The remaining 8,860 specimens required follow-up via letters, personal visits to the physician by health department personnel, and telephone calls to physicians. This follow-up resulted in the reporting of 126 new cases of infectious syphilis, 1,764 new cases of latent syphilis, and 3,413 Biological False Positives.

C. From miscellaneous sources 0.8% were reported. These included out-of-state health departments and Youth Homes.

Figure #1 shows the rising percentage and total number of infectious syphilis cases reported by

PERCENT OF TOTAL
PRIMARY AND SECONDARY SYPHILIS
REPORTED BY
PRIVATE PHYSICIANS

Detroit, Michigan

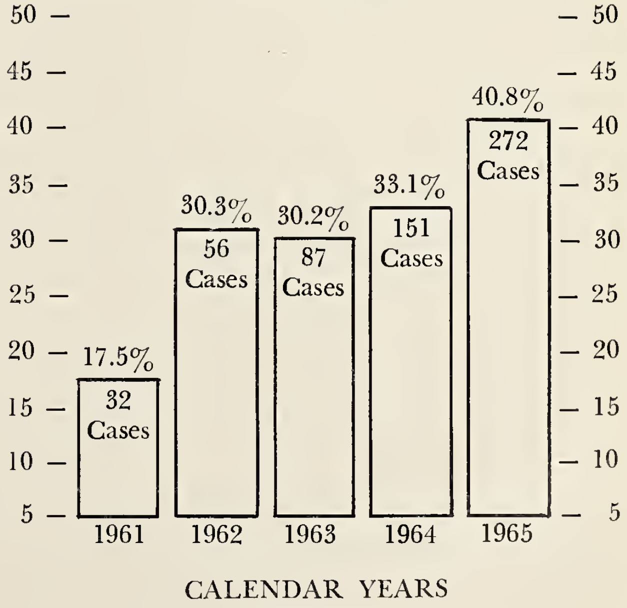


Figure #1

Doctor Schwimmer is Director, Social Hygiene Clinic, Detroit Health Department; Associate Clinical Professor of Dermatology, Wayne State University School of Medicine; Chairman, MSMS Committee on Venereal Disease Control.

Detroit private physicians. These rising figures are encouraging, for in the absence of an immunizing agent, the control of infectious syphilis depends on the following measures:

1. The early reporting of all diagnosed cases.
2. The early follow-up of all reactive laboratory tests for syphilis.
3. The early interview of all diagnosed and reported cases for their sex contacts.
4. The early finding of named sex contacts; the early examination and treatment, either for cure or prophylaxis.
5. The active interest and cooperation of private physicians and laboratories in the above measures.

The figures and facts quoted above indicate that the private practitioner and the private laboratory in Detroit are very interested, and are participating effectively in the struggle to control the rising tide of infectious syphilis.

Start Your V.D. Campaign

The AMA has all the materials you need to start an information-packed campaign against syphilis and gonorrhea — the highly contagious diseases that threaten epidemic proportion in our country. You can perform a real public service by displaying and distributing the authoritative, factual and interesting pamphlets and Timely Tip Leaflet and the reminder poster in schools, libraries and public buildings in your community.

The pamphlets:

123. Why the Rise in Teenage Syphilis?

Case histories of adolescents who have contracted syphilis. Also, facts about how the disease is spread, its stages of development and the prognosis for cure. (2¢ each for 100 or more)

122. Why the Rise in Teenage Gonorrhea?

Tells why all the fuss about gonorrhea when its cause and cure are already known. Firsthand reports of teens who have acquired the highly contagious disease. (2¢ each for 100 or more)

12. Venereal Disease is Still a World Problem.

A report on the increase in syphilis and gonorrhea infections throughout the world. A frank discussion of how V.D. is spread, early symptoms, proper treatment and effects of neglect. (2¢ each for 100 or more)

Timely Tip — V.D.'s Dubious Distinction

A leaflet that tells how syphilis and gonorrhea are spread, who the victims are, signs and symptoms and what to do to assure prompt diagnosis, treatment and cure. (10¢ per 100)

V.D. Poster

A dramatic reminder to learn the facts about V.D. and to confide in your physician. 2 colors 18½" x 22⅞", fits into frame of AMA Health Education Poster Series. (35¢ each)

Transthoracic Vagotomy For Recurrent Peptic Ulcers

By Franklin R. Jackson, M.D.

Ernest M. Berkas, M.D., Ph.D., F.A.C.S.

Transthoracic vagotomy is a safe, simple, and effective means of treating recurrent peptic ulcer disease, providing adequate drainage of the stomach has been previously effected.

Thirty-four patients with active recurrent acid peptic disease have been successfully managed via supra-diaphragmatic transthoracic vagotomy. Thirteen of these were patients with marginal ulcers following standard subtotal gastrectomy, 11 following segmental gastric resection, and 10 following transabdominal vagotomy and pyloroplasty. In each instance there has been clinical and roentgenographic evidence of healing.

This approach has many advantages over operative procedures to further resect the stomach, obviating the higher morbidity associated with the latter. Splenic injury is unlikely, abdominal adhesions need not be dealt with, and a more complete vagotomy is possible. However, it should be noted that one does not have the opportunity to visualize the ulcer nor to check for stomal obstruction and pancreatic tumors.

There were two major complications in the 34 patients so treated with transthoracic vagotomy for recurrent ulcers. Both involved gastric outlet obstruction, manifested four weeks and six months postoperatively, requiring further surgery for drainage of the stomach. Transient diaarhea and incisional pain were seen in several patients.

The follow-up has been five to thirty-eight months. This is too early to prognosticate on long-term results. However, our results would suggest that patients with recurrent active ulcer disease, who have had previous indicated surgery including adequate drainage, can be more effectively managed by transthoracic vagotomy than by an extensive transabdominal procedure.

V.D.'s Dubious Distinctions
Did You Know . . .

That

The venereal diseases, syphilis and gonorrhea, have ecome the No. 1 infectious disease problem in he United States.

* * *

That

yphilis and gonorrhea are attacking 3,000 persons day in the United States, of whom 600 a day are eenagers. Syphilis alone attacks 15,000 persons er month.

* * *

hat

urrent estimates are that syphilis alone is prob- bly contributing to 1,000 deaths per month.

* * *

hat

yphilis particularly has moved up in society as vell as down in age. It is now regarded by public iealth people to be a largely middle-class problem, lthough it strikes at all elements of society.

* * *

hat

ewer than 5 per cent of young people leaving or raduating from high schools last year had the enefit of adequate VD education, although it has een demonstrated that such education does not equire more than from two to six hours total time o be effective; it can be done in as little as two by naking use of programmed learning materials now vailable.

* * *

hat

yphilis could be eradicated entirely from the Jnited States by 1972 through a combination of ducation and epidemiology, or epidemic control. No timetable has been set for gonorrhea, because here are still a number of problems to be solved n connection with this disease.

* * *

hat

t is costing $50,000,000 a year in our nation just o support the victims of syphilitic insanity in tax-supported mental institutions; another $6,000,000 per year to aid the victims of syphilitic blindness.

* * *

That

The U.S. Public Health Service estimates that at least one million persons in this country need treatment for syphilis at the present time. If they are not treated, one in 13 will develop syphilitic heart disease; one in 25 will be crippled or incapacitated; one in 44 will develop syphilitic insanity; and one in 200 will become blind.

* * *

That

Over half of all new VD infections are found in teenagers and young adults under 25 years of age.

Syphilis Serology

The United States Public Health Service has notified the Chief of the Bureau of Laboratories, Michigan Department of Public Health, that as of July 1, 1966, the Hinton, Mazzini, and Kline tests are no longer being performed by the Venereal Disease Research Laboratory, and for this reason reagents and controls for these tests will not be maintained or check tested.

This change in U.S. Public Health Service policy will mean that no reference laboratory will be available to the Bureau of Laboratories, Michigan Department of Public Health for evaluation of performance of Hinton, Mazzini and Kline tests. Under these circumstances the Bureau of Laboratories will not attempt recognition of the three tests in the next year's evaluation series. Laboratories performing any of these serologic tests for syphilis are hereby notified that after January 1, 1967, the Michigan Department of Public Health will no longer recognize Hinton, Mazzini or Kline tests as standard serologic procedures.

As of January 1, 1967, Standard Serologic Tests for Syphilis will include the VDRL Slide Test, the Reiter Protein Complement Fixation Test and Kolmer Complement Fixation Test.

Films Help Tell V.D.'s Educational Story

The following films are available to interested physicians and county medical societies as they tie in local activities with the AMA and MSMS efforts this fall on Venereal Disease Education.

The films are available from:

Film Library
Michigan Department of Public Health
3500 North Logan
Lansing, Michigan 48914

Because of the increasing demand for venereal disease films, it is advisable to order these two months in advance of desired showing dates.

* * *

"A QUARTER MILLION TEENAGERS"

Motion Picture: 16 mm., color, sound, 16 min.

Audience: Junior high and senior high.

Summary: The film is designed to help the health educator or the teacher without special competence in the field of venereal disease instruction to present the pertinent physiological and health information. The presentation is vivid without being dramatic, the approach factual and unemotional. The intention is to provide the educator with an aid which can be used in communities that have been slow to accept responsibility for health education in this sensitive subject area.

* * *

"DANCE LITTLE CHILDREN"

Motion Picture: 16 mm., color, sound, 25 minutes, 1962.

Audience: General public.

Summary: This thought-provoking film for parents centers around a syphilis outbreak among teenagers in a typical American city. It illustrates the responsibility of the parents and gives information on some of the causes and possible answers related to the occurrence of the outbreak.

* * *

"THE INVADER"

Motion Picture: 16 mm., black and white, sound, 29 minutes.

Audience: High school and college students, and all adults.

Summary: The story of man's efforts since the fifteenth century to cope with syphilis. Shows the step-by-step development of medical knowledge, and the changes in public attitude toward the disease. The film tells its story through the available document of each age.

"THE INNOCENT PARTY"

Motion picture: 16 mm., color, sound, 17 min.

Audience: High school and college groups, youth organizations, civic groups, and health departments.

Summary: How one young man in a moment of indiscretion contracts venereal disease from a pick-up, and what happens to him and his "steady" girl. In terse dramatic sequences "The Innocent Party" tells how he comes to learn the tragic significance of his ill-advised actions and to realize his responsibility to himself and to those he loves. A simple, sincere document of the nature, recognition, cure and control of syphilis.

* * *

"A RESPECTABLE NEIGHBORHOOD"

Motion picture: 16 mm., black and white, sound, 25 minutes, 1961.

Audience: General public, public health personnel, high school and college groups, civic, and PTA organizations.

Summary: Depicts the contributions of a local health department in the control of syphilis and points out that syphilis is not restricted to the low socio-economic groups but is a problem in all areas. Emphasized harm done to young people because of ignorance of VD and sexual behavior.

* * *

"IDENTIFICATION OF EARLY SYPHILIS"

Motion picture: 16 mm., color, sound, 30 minutes, 1961.

Audience: Medical students, physicians.

Summary: A simulated medical school lecture on the subject of the identification of early syphilis. It stresses the importance of suspecting syphilis in office patients, the necessity of being able to recognize the signs of early syphilis, and the need for prompt and effective epidemiology. A major portion of the film is devoted to clinical color slides.

* * *

"A PRACTICAL VIEW OF SYPHILIS"

Motion picture: 16 mm., color, sound, 25 min.

Audience: Medical students, physicians.

Summary: A lecture type film on the diagnosis and management of syphilis in all stages, using clinical color slides and illustrations. Among the topics discussed are: syphilis stages (primary & secondary, latent cardiovascular, central nervous system, congenital); syphilis in pregnancy; spinal fluid examinations; interpretations of serologic tests for syphilis; penicillin therapy and use of alternate antibiotics; follow-up after treatment; and epidemiology. For professional groups.

The Mediatric Age:

There is a growing senescent body of people on their way to malignant inactivity, who sorely need your nterest and direction to help them back to a more active and useful life. There are medicines too, designed to help. One such has proved useful in clinical practice.

"A steroid-nutritional compound (Mediatric) was used in 100 patients to relieve some of the symptoms caused by degenerative changes of aging . . . This therapy resulted in improvement of 75 per cent of the patients . . ."

McNeill, A. J.: Clin. Med. *8*:518 (Mar.) 1961.

"Mediatric (steroid-nutritional compound) capsules, one a day, seem to give definite help to debilitated patients."

Arnold, E. T., Jr.: Geriatrics *12*:612 (Oct.) 1957.

"Nutritional and hormone bolstering of function in the aged may have a useful place in geriatrics."

Morgan, A. F.: Gerontologist *2*:77 (June) 1962.

"In diets which for any reason are restricted in calories, enough of these substances (B vitamins) may not be supplied . . . The use of B and C vitamin supplements may then be justified and indeed may be necessary."

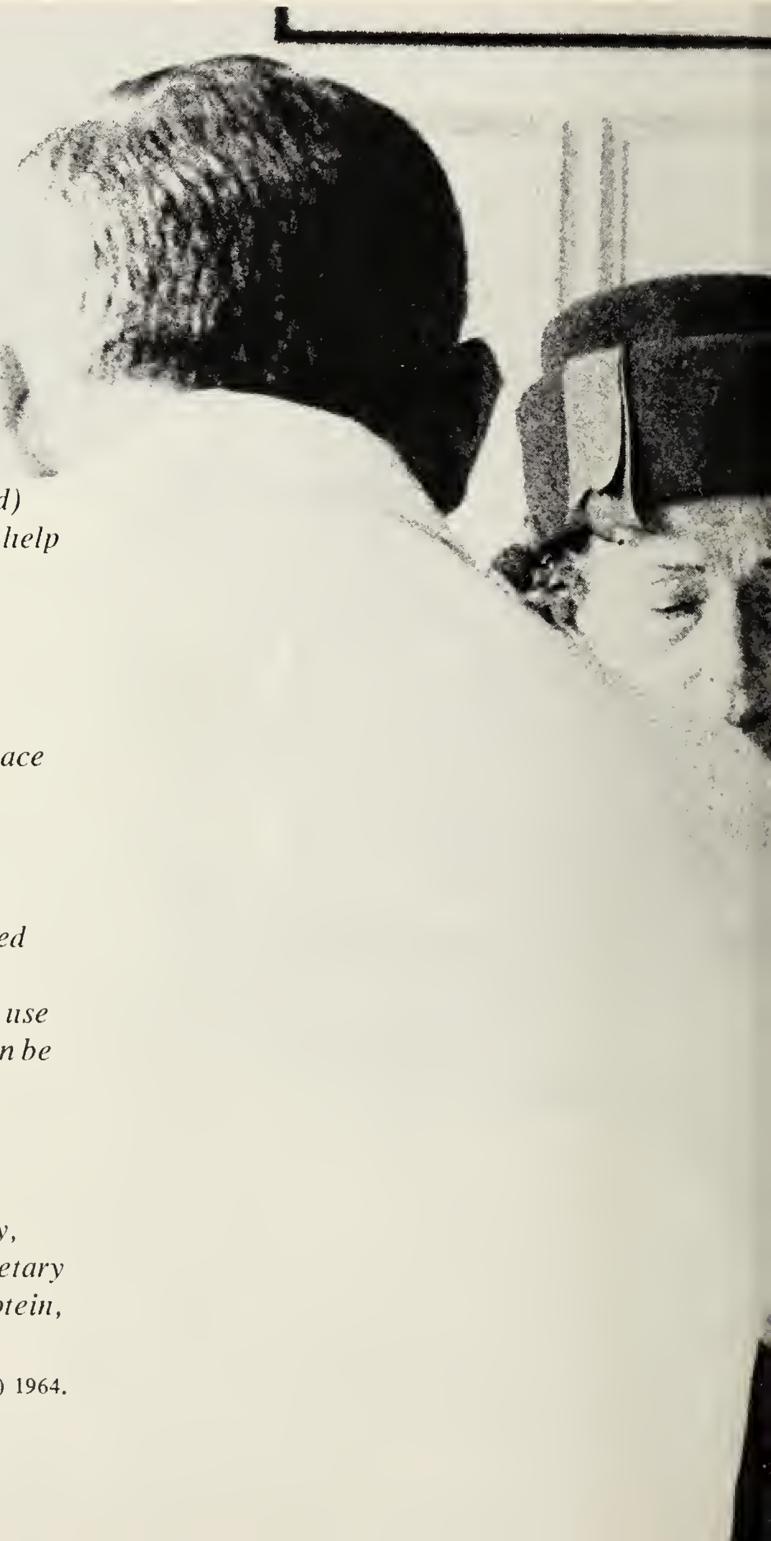
Morgan, A. F.: Gerontologist *2*:77 (June) 1962.

"Intensive nutritional therapy is necessary, especially in elderly people, to correct dietary deficiencies created by large losses of protein, vitamins and other nutrients."

Riccitelli, M. L.: J. Am. Geriatrics Soc. *12*:489 (May) 1964.

The Mediatric Age:

Unfortunately, there is no cure. But there are, largely through your own interest and direction, ways to help them back to a more active and useful life. There are medicines, too, designed to help. One such has proved useful in clinical practice:



"A steroid-nutritional compound (Mediatric) was used in 100 patients to relieve some of the symptoms caused by degenerative changes of aging . . . This therapy resulted in improvement of 75 per cent of the patients . . ."

McNeill, A. J.: Clin. Med. *8*:518 (Mar.) 1961.

"Mediatric (steroid-nutritional compound) capsules, one a day, seem to give definite help to debilitated patients."

Arnold, E. T., Jr.: Geriatrics *12*:612 (Oct.) 1957.

"Nutritional and hormone bolstering of function in the aged may have a useful place in geriatrics."

Morgan, A. F.: Gerontologist *2*:77 (June) 1962.

"In diets which for any reason are restricted in calories, enough of these substances (B vitamins) may not be supplied . . . The use of B and C vitamin supplements may then be justified and indeed may be necessary."

Morgan, A. F.: Gerontologist *2*:77 (June) 1962.

"Intensive nutritional therapy is necessary, especially in elderly people, to correct dietary deficiencies created by large losses of protein, vitamins and other nutrients."

Riccitelli, M. L.: J. Am. Geriatrics Soc. *12*:489 (May) 1964.

Mediatric®

Designed for the "metabolically spent"

Nutritional reinforcement for those who can't – or won't – eat properly...balanced amounts of estrogen and androgen to counteract declining gonadal hormone secretion and its sequelae of premature degenerative changes...mild antidepressant for a gentle "mood" uplift...

The estrogen component in MEDIATRIC is PREMARIN® (conjugated estrogens—equine), the natural estrogen most widely prescribed for its superior physiologic and metabolic benefits.

MEDIATRIC also provides *nutritional reinforcement—blood-building factors and vitamin supplementation*. It contributes a *gentle "mood" uplift* through methamphetamine HCl.

Three different dosage forms—Liquid, Tablets, and Capsules—offer convenience and variety.

MEDIATRIC Liquid

Each 15 cc. (3 teaspoonfuls) contains:

*Conjugated estrogens—equine (Premarin®)	0.25 mg.
Methyltestosterone	2.5 mg.
Thiamine HCl	5.0 mg.
Cyanocobalamin	1.5 mcg.
Methamphetamine HCl	1.0 mg.

Contains 15% alcohol

MEDIATRIC Tablets and Capsules

Each MEDIATRIC Tablet or Capsule contains:

*Conjugated estrogens—equine (Premarin®)	0.25 mg.
Methyltestosterone	2.5 mg.
Ascorbic acid	100.0 mg.
Cyanocobalamin	2.5 mcg.
Intrinsic factor concentrate	8.0 mg.
Thiamine mononitrate	10.0 mg.
Riboflavin	5.0 mg.
Niacinamide	50.0 mg.
Pyridoxine HCl	3.0 mg.
Calc. pantothenate	20.0 mg.
Ferrous sulfate exsic.	30.0 mg.
Methamphetamine HCl	1.0 mg.

*Orally active, water-soluble conjugated estrogens derived from pregnant mares' urine and standardized in terms of the weight of active, water-soluble estrogen content.

MEDIATRIC helps keep the older patient alert and active; helps relieve general malaise, easy fatigability, vague pains in the bones and joints, loss of appetite, and lack of interest usually associated with declining gonadal hormone secretion.

CONTRAINDICATION: Carcinoma of the prostate, due to methyltestosterone component.

WARNING: Some patients with pernicious anemia may not respond to treatment with the Tablets or Capsules, nor is cessation of response predictable. Periodic examinations and laboratory studies of pernicious anemia patients are essential and recommended.

SIDE EFFECTS: In addition to withdrawal bleeding, breast tenderness or hirsutism may occur.

SUGGESTED DOSAGES: *Male and female:* 3 teaspoonfuls of Liquid, 1 Tablet, or 1 Capsule, daily or as required.

In the female: To avoid continuous stimulation of breast and uterus, cyclic therapy is recommended (3 week regimen with 1 week rest period—Withdrawal bleeding may occur during this 1 week rest period).

In the male: A careful check should be made on the status of the prostate gland when therapy is given for protracted intervals.

SUPPLIED: No. 910 – MEDIATRIC Liquid, in bottles of 16 fluidounces and 1 gallon. No. 752 – MEDIATRIC Tablets, in bottles of 100 and 1,000. No. 252 – MEDIATRIC Capsules, in bottles of 30, 100, and 1,000.

Mediatric®

steroid-nutritional compound

MEDIATRIC
LIQUID
MEDIATRIC
TABLETS

AYERST LABORATORIES, NEW YORK, N.Y. 10017 • Montreal, Canada

The Origins of The Great American Society

By C. T. Hardwick, Ph.D.
Consulting Economist
Michigan State Medical Society

It has often been observed that from the pages of history came a story of reality that we can read and learn to live by. Let us take a few moments to look at the historical foundations of the Great American Society. There may be some lessons of interest for contemporary leaders and citizens.

A certain type of adventurous and courageous group of Europeans left the comfort of their homelands to discover and settle the unknown land which we call America. Their numbers included persons from all classes, all creeds, many nations, many skills, many religions, and of numerous sizes and abilities. They sought a new life — one of freedom and independence. Some became pioneering farmers, some traders, some businessmen, some educators, some politicians, some providers of medical and health care, some lawyers, some engineers, and a host of producers of material and social benefits.

Americans learned to fight Indians, natural enemies, social discontent, exploitative employers; both natural and social destroyers of mankind. Nevertheless, in spite of war, famine and pestilence, the American pioneers built the foundations of a Great Society. The plateau of greatness has been reached in the 20th century with widespread wealth evidenced in better homes, more appliances, more cars and highways, bigger factories, greater cathedrals, magnificent schools and more efficient hospitals for almost everybody. However, some Americans have been passed by with prosperity and we still seek equality for all and a sharing with everybody.

What Is the Meaning of The Great Society?

Behind the Madison Avenue slogans and the political campaign speeches must be some practical goals. Let us begin to analyze the practical side of the American Dream. From the many writings and speeches, a few realistic guesses can be ventured. In order to make America a better place to live, the proponents of the Great Society aim to:

— eliminate pockets of poverty
— educate more Americans to higher levels
— provide better health for more people
— make America more beautiful
— eliminate slums through urban renewal
— assist undeveloped nations
— fight communism with democrary and missiles
— reduce unemployment to minimum

All of the foregoing are worthy goals but close examination will reveal that no simple decree from Washington will achieve perfect results. No, it seems more reasonable to observe that the voluntary and independent society must work harder as *individuals* and more *cooperatively* as groups if such idealistic goals are to be accomplished. Let us remember that America has traveled a long road since our Declaration of Independence. We are a great nation. We have prosperity for more men than any other nation. We have preserved some freedom. We are still free to pursue individual happiness. No collective state has yet reached our plateau of greatness. Let us pursue the achieving of the goals of the Great Society without destroying that which has made us "near great."

Essential Factors of American Success

There are at least five supporting pillars of the Great American Society:

1. *Social-Economical-Political* frame of reference encouraging and guaranteeing freedom and independence of individual and group efforts.

(Continued on Page 846)

The Author

C. T. Hardwick, Ph.D.

Frankly, most antihyper-
ensives are pretty good if
ou give an adequate dose.
'm looking for one with a
imple regimen so that mix-
ps in doses and therefore
he chance of side effects
re minimized.

Regroton®
hlorthalidone 50 mg. reserpine 0.25 mg.

tablet daily
rings pressure down

dvantage: Both components of Regroton
re long-acting.
verage dosage: One tablet daily with
reakfast.
ontraindications: History of mental
epression, hypersensitivity, and most
ases of severe renal or hepatic diseases.
arning: Discontinue 2 weeks before
eneral anesthesia, 1 week before electro-
hock therapy, and if depression or
eptic ulcer occurs. With administration
f enteric-coated potassium supplements,
e possibility of small bowel lesions
hould be kept in mind.
recautions: Reduce dosage of con-
omitant antihypertensive agents by one-
alf. Discontinue if the BUN rises or
ver dysfunction is aggravated. Electro-
te imbalance and potassium depletion
ay occur; take particular care in
irrhosis or severe ischemic heart disease,
nd in patients receiving corticosteroids,
CTH, or digitalis. Salt restriction is not
ecommended. Use with caution in
atients with ulcerative colitis, gall-
tones, or bronchial asthma.
de effects: Nausea, vomiting, diarrhea,
uscle cramps, headaches and dizziness.
tential side effects include angina pecto-
, anxiety, depression, drowsiness,
perglycemia, hyperuricemia, lassitude,
ukopenia, nasal stuffiness, nightmare,
urpura, urticaria, and weakness.
r full details, see the complete prescrib-
g information.
vailability: Bottles of 100 and 1000 tablets.

Geigy

2. *Scientific Technology* providing discovery and implementation of productive means of material welfare.

3. *Natural wealth* of our forests, mines, land, and waterways.

4. Healthy, strong and resourceful human resources with native intelligence and capacity to learn, study and grow up to the fulfillment of natural potentialities.

5. In addition to the private and public sectors of society, Americans have added a third segment of *voluntary* and *independent* groups in which individuals join hands for a common cause.

Individualism — Key to Greatness

If we review greatness in a profession, in business, in social action, in politics, or in a family, there appears to be one essential ingredient present at all times — that is usually called *individualism.* Someone, somewhere, puts forth extra effort, someone exceeds normal expectations, someone develops a special skill, someone takes ordinary talent and makes a special effort resulting in an extraordinary result. Therefore, it seems obvious that the altruistic goals of the Great Society cannot be given by the government but must be earned by the efforts of individuals. Thus, the question of achievement depends upon the willingness of individuals to pay the price of achievement. Of course, government can assist by improving the *climate* for private development up to personal potentiality.

Someone has suggested all societies depend upon three efforts, namely: the brute physical force; the mystic; and the thinker. During the early rough days of a pioneering society the dominating factor was surely "brute physical force." However, in the mid-twentieth century, a sophisticated American cannot become dependent on either the mystic or brute, but the essence of survival will focus on the mind. We can progress only as far as the intellectual leaders integrate the variety of socio-economic means to secure a better society for the greater number. Obviously, leaders of professional societies must assume their share of burden to provide creative answers to the many demands. We cannot wait for politicians or others to force us to comply. We must be out in front with our voluntary proposals.

The Future: Some More of the Same

Each and every generation must find its own answers to the eternal questions of growth or even survival. During the second half of this century, we cannot depend entirely upon the answers of previous generations. Nevertheless, contemporary America should not be tempted to abandon the essential factors which have permitted our achievement of greatness. Thus, the five pillars of greatness may need refinement and improvement. For example, individuals must work harder not less; science must help, not kill mankind; natural wealth must be conserved, not wasted; voluntary groups must be reorganized for greater efficiency, not abolished; government must change to provide a better climate for private enterprise to flourish and not to become a replacement for private endeavors. In summary, we must work harder to make our free and independent society a better place to live, work and build a real Great Society!

PULMONARY TUBERCULOSIS FILMS, PAMPHLETS AVAILABLE

Pulmonary tuberculosis is still a substantial disease problem in Michigan, reports the MSMS Committee on Respiratory Diseases. Furthermore, the Committee recommends that all physicians be aware of this problem and make the tuberculin skin test a part of every routine examination.

To further inform physicians about respiratory diseases, a variety of publications from the National Tuberculosis Association are available to all physicians on request to the MSMS headquarters. In addition, there are several new and excellent films available which emphasize the proper treatment of respiratory diseases. Included in the films are "Working for Better Public Health" (obtainable from the Michigan Department of Public Health) and "Chronic Bronchitis and Pulmonary Emphysema" (obtainable from the Michigan Tuberculosis and Respiratory Disease Association).

The pamphlets referred to are called "Abstracts on Tuberculosis and Other Respiratory Diseases." Issued by the National Tuberculosis Association, copies may be had from the Michigan Tuberculosis and Respiratory Diseases Association, 403 Seymour Street, Lansing.

Some of the available pamphlets are:

"Death from Asthma in Children"
"Etiology of Acute Respiratory Infections"
"Chemoprophylaxis in Chronic Pulmonary Emphysema"
"Polonium in Pulmonary Tissues of Cigarette Smokers"
"Etiology of Upper Respiratory Illness Among Civilian Adults"
"Epidemics of Tuberculosis"
"Pulmonary Tuberculosis Among Older Persons"

Smoking-Health Institute Set For Oct. 19-21

On October 19-21 an Institute on Smoking and Health will be held at Kellogg Center, Michigan State University. Sixty Leaders in the field of smoking and health from Michigan will gather for the Institute, sponsored by the National Clearinghouse on Smoking and Health in cooperation with the Michigan Council on Smoking and Health, Michigan Health Council and Michigan State University.

The Michigan Council on Smoking and Health is composed of 11 individuals who represent the prin-ipal health and educational organ-zations in the state — representa-ives are from MSMS, American Cancer Society, Michigan Heart Association, Michigan Tuberculosis and Respiratory Disease Association, Michigan Cancer Foundation, Michigan Department of Education, Michigan Department of Pub-ic Health, Michigan Education As-ociation, and the Michigan Health Council.

The principal objectives of the moking Council are to coordinate he smoking educational programs f various organizations interested n this field, to inform the public n the relation of smoking to ealth, and to encourage the use f research in all areas related o smoking and health.

Chairman of the Council is Eliza-eth L. Wheeler, Professor of Health Education, Central Michi-an University. Robert E. Rowe, M.D., Health Officer of St. Clair ounty is Vice-Chairman.

Helen Hebeler, veteran of a 50-ear nursing career at University ospital, was honored recently at tea which also marked the 75th niversary of nursing education the University of Michigan.

FILL

SOKOLOWSKI

Two Physicians Seek Votes for Educational Posts

Two MSMS members are candidates for state office this fall.

Leon Fill, M.D., Detroit, is a candidate for re-election as a member of the Michigan State Board of Education. He is a Democrat.

Alfred Sokolowski, M.D., Detroit, is a candidate for election to the Wayne State University Board of Governors. He is a Republican.

MSMS officials have pointed out the importance of the November 8 contests, not only for gubernatorial positions, state administrative board, U.S. senatorial seats, and the Michigan legislative seats, but also for the two to the University of Michigan Board of Regents, two to the Wayne State University Board of Governors, two to the Michigan State University Board of Trustees, and two seats on the Michigan Board of Education. Important decisions affecting the medical professions will be made by each of these educational governing boards, it is pointed out.

Editorial Says Government Should Pay Going Rate

The following editorial views were presented recently by the Chicago Tribune in discussing a story about MD fees in the New York Times:

"What the Times report boiled down to was simply that many doctors who have been treating the elderly and indigent at cut-rate fees, out of consideration for these patients, are raising the fees to conform to their standard fees. "I'm not raising fees," one doctor protested, "but eliminating a discount."

"This doesn't strike us as unreasonable. There is no reason why a doctor who has been helping elderly patients by charging less than the going rate should now be expected to grant the same subsidy to the government — especially when he is paying social security taxes himself for benefits which, in all likelihood, he will never receive. Doctors rarely retire at 65, and with today's shortage there is more need than ever for them to stay on the job.

"If the government, for its part, wants the elderly to receive the quality of care that they have been promised under the voluntary, supplemental program to which nearly all of them have subscribed, it hardly makes sense for it to refuse to pay what other patients pay."

(Excerpted from Chicago Tribune, August 27, 1966)

ACP to Confer Soon in Detroit

The American College of Physicians will hold a regional meeting November 18-19 for internal medicine specialists in Michigan.

The meeting will be held at the Hotel Pontchartrain in Detroit.

The Michigan meeting is one of 29 scientific seminars sponsored each year by the ACP throughout the United States and Canada.

John A. Layne, M.D., great Falls, Mont., ACP Third Vice-President, will be a special guest.

Noyes L. Avery, Jr., M.D., Grand Rapids, ACP Governor for Michigan, is in general charge of the meeting.

HEALTHMOBILE JUDGED THE BEST AT FAIR

The Healthmobile, a travelling medical exhibit on the history of medicine in Michigan, sponsored by Wayne County Medical Society and its Auxiliary, was judged to be the best medical exhibit at the 1966 Michigan State Fair.

Walter Goodman, left, General Manager of the Michigan State Fair, presents the award to Brock E. Brush, M.D., President of Wayne County Medical Society, while Mrs. Harvey Lynn, President of the Woman's Auxiliary in Wayne County receives plaudits too.

Answers to Some Questions About Medicare:

Here are some problems already encountered since Medicare began on July 1, and solutions by the Social Security Administration to ease the difficulties:

To save time and trouble on hospital outpatient billing, diagnostic tests need not be individually listed but can be grouped into descriptive categories. For example, CBC, hematrocrit, and sedimentation rate can be grouped under the single heading of "hematology."

The necessity for detailed itemization on billing form SSA-1554 of laboratory and X-ray procedures has been eliminated for hospitals and physicians who have agreed to use the optional method of applying a percentage against total departmental charges in determining the amount of reimbursement for physician charges.

Where hospitals and hospital-based physicians had not reached final agreement on the basis for determining charges, a preliminary estimate of percentages, made by the carrier after consultation with both parties, was allowed.

An SSA district office can issue a temporary notice of eligibility where an individual who is obviously eligible for health insurance benefits enters a hospital before his claim for social security cash benefits has been processed.

It will not be necessary to file a new admission and billing form when a patient has been on furlough from a psychiatric or TB hospital.

NEWS - AND IT'S BRIEF

Fifteen Michigan physicians participated in the Third Regional Conference on Cardiopulmonary Resuscitation and Coronary Care Units, September 30 and October 1 at the Northland Inn in Southfield.

The conference was sponsored by the Cardiopulmonary Resuscitation Committee of the American Heart Association.

The participants included: John G. Bielawski, M.D., of Detroit; Robert A. Gerisch, M.D., of Detroit; Eugene Plous, M.D., of Detroit; Larry H. Birch, M.D., of Grand Rapids; C. M. Vasu, M.D., of Grand Rapids; Richard L. Rapport, M.D., of Flint; Neil M. Woodruff, D.O., of Flint; Edwin C. Blumberg, D.O., Farmington; Ralph L. Brandt, M.D., of Ann Arbor; Jack Bronfenbrenner, M.D., of Benton Harbor; Malcolm K. Dolbee, M.D., of Standish; Omero S. Iung, M.D., of Lansing; Jack M. Kaufman, M.D., of Huntington Woods; George Ritter, M.D., of Lathrup Village; and Ross V. Taylor, M.D., of Jackson.

* * *

Appointment of Jacob L. Chason, M.D., as Chairman of the Department of Pathology at the Wayne State University School of Medicine was approved recently by the Wayne State University Board of Governors. Acting Chairman of pathology since 1964, Dr. Chason joined the faculty as assistant professor of pathology in 1949.

A graduate of the University of Michigan Medical School, Dr. Chason later was a Visiting Fellow in Neuropathology at the Mayo Clinic and went to London, England as National Institutes of Health Senior Fellow in Neuropathology

Important Information on Title XIX (Medicaid) Rules and Regulations for Implementation Of Michigan Plan — MD Program

EDITOR'S NOTE: This special insert contains the complete text of Part 4, entitled "Medical Assistance," of the State plan for implementation of Title XIX (Medicaid). It provides complete information to doctors of medicine in their care of medical patients classified as either categorically needy or medically indigent. This program has been submitted by the Michigan Department of Social Services and early approval is expected from the federal Department of Health, Education and Welfare. This plan begins on October 1, 1966, for hospital, outpatient physician services and nursing home care. Starting January 1, 1967, it affects home, office physician and pharmaceutical services. MSMS suggests that this special insert be removed from **Michigan Medicine** for retention and filing for ready reference.

* * *

IV. Medical Assistance (D-5000)

A. AMOUNT, DURATION, AND SCOPE OF ASSISTANCE (D-5100)

1. The following items of medical and remedial care and services, and the amount and/or duration of each, will be provided to all categorically needy and medically needy persons eligible under the plan.

   a. INPATIENT HOSPITAL SERVICES

   The following hospital services are covered when furnished by the hospital under the direction of a physician or dentist:

   1) Bed and board, including special dietary service, in a semiprivate room or, if medically necessary, in a private room.
   2) Medical, obstetrical, surgical services including use of operating room, delivery room, recovery room, etc.
   3) Drugs
   4) Therapeutic and diagnostic X-ray and laboratory services.
   5) Physical and occupational therapy.
   6) General nursing service incidental to the care and treatment of the patient.
   7) Whole blood when it is not available from other sources.
   8) The use of prosthetic and surgical appliances and any other equipment essential to the treatment of the patient while an inpatient. When necessary, the purchase of such equipment will be allowed while the patient is hospitalized.

   All hospitalization, with the exception of emergency admission and treatment must be made upon the direction of a physician. The period of covered inpatient hospital services is the minimum period necessary in this type of facility for the proper care and treatment of the patient. Periodic recertification of need for care by the attending physician will be required.

   b. OUTPATIENT HOSPITAL SERVICES

   Outpatient services may be provided only at the direction of a physician or dentist and are limited to the services identified below:

   Radium treatment
   Therapeutic X-ray
   Diagnostic X-ray
   Emergency first aid
   Physical therapy
   Laboratory tests
   Electro-cardiogram
   Electro encephalogram
   Basal metabolism
   Filling and instructions pertaining to prosthetic appliances.

   c. OTHER LABORATORY AND X-RAY SERVICES

   The following services may be provided in a physician's office if ordered by a physician or dentist:

   Therapeutic and diagnostic X-ray
   Electro-cardiogram
   Electro encephalogram
   Basal metabolism
   Laboratory tests

   Laboratory tests may also be provided by a certified laboratory if ordered by a physician or dentist.

Important - Please Read

This information was specially printed as a four-page reference to help you in your practice. Please remove and save for future use.

d. SKILLED NURSING HOME SERVICES

The following services are included when furnished by a licensed nursing home or medical care facility to persons 18 and older who are under the care of a physician:

1) Bed and board, including special dietary services, in a semiprivate room or, if medically necessary, in a private room.
2) Nursing care and use of equipment which is owned by the home and is ordinarily provided in the care and treatment of the patient.
3) Other medical services related to nursing care including services of physical and occupational therapist.

All services listed above are available to mental and TB patients 65 or older in a licensed nursing home when the alternative to such care would be hospitalization.

In specified skilled nursing homes and medical care facilities physical therapy and diagnostic X-ray are also available on an outpatient basis.

The period of covered nursing home services is the minimum period necessary in this type of facility for the proper care and treatment of the patient. There is no requirement for prior hospitalization; however, admission to a skilled nursing home must be upon the written direction of a physician or a certified Christian Science practitioner who must periodically recertify need for care.

To facilitate implementation of this program, it will be assumed that medical need for care exists for those patients in a nursing home and receiving care under the State's approved plan for medical assistance to the aged in a skilled nursing home or medical care facility who are transferred to the medical assistance program authorized by Title XIX until such time as their eligibility for medical assistance is redetermined. After such redetermination is made, the above standard will apply.

e. PHYSICIANS' SERVICES

Physicians' services may be provided only by an individual licensed under state law to practice medicine or osteopathy and are limited to inpatient and outpatient hospital care as necessary for treatment and emergency treatment wherever provided. Services of interns, residents and physicians in administrative capacities in participating institutions are included insofar as they are a part of the hospital's charge.

f. HOME HEALTH SERVICES

Includes those covered services identified below furnished by a certified home health agency and authorized by and under the direction of a physician for a patient in his place of residence (not hospital or skilled nursing home) for the minimum period necessary for the proper care and treatment of the individual.

Covered services include only intermittent or part-time nursing services, home health aide services, physical and occupational therapy.

g. INPATIENT HOSPITAL SERVICES AND SKILLED NURSING HOME SERVICES FOR INDIVIDUALS OVER 65 IN AN INSTITUTION FOR TUBERCULOSIS OR MENTAL DISORDERS

Included are those items and services which are ordinarily furnished by the institution under the direction of a physician to inpatients or patients on a day care or night care plan. See Section B below.

The period of covered service is the minimum period necessary in these types of facilities for the proper care and treatment of the individual as certified by the attending physician at least quarterly.

h. TRANSPORTATION

Transportation services are limited to ambulance service to and from a hospital when medically necessary.

Those items identified above include some institutional and some non-institutional care, inpatient hospital services, outpatient hospital diagnostic services, and the first three pints of whole blood (when it is not available to the patient from other sources).

Effective July 1, 1967 at least the following items of care and services will include:

a) Inpatient hospital services (other than services in an institution for tuberculosis or mental diseases) paid on a *reasonable cost* basis;
b) Outpatient hospital services;
c) Other laboratory and X-ray services
d) Skilled nursing home services (other than services in an institution for tuberculosis or mental diseases) for individuals 21 years of age or older;
e) Physicians' services, whether furnished in the office, the patient's home, a hospital, or a skilled nursing home or elsewhere.

2. The medical and remedial care and services made available to any categorically needy in-

dividual included under the plan will not be less in amount, duration, or scope than those made available to other individuals included under the program.

Except that, as specified in Item 1 above, (a) skilled nursing home services are limited to persons 18 years of age or older, and (b) services to persons in institutions for tuberculosis or mental diseases are limited to persons 65 years of age or over.

3. The medical and remedial care and services made available to a group (i.e., either the categorically needy or the medically needy) will be equal in amount, duration, and scope for all individuals within the group (with the permissible exceptions specified in Item 2, above).

4. The State agency will provide for broadening the scope of the medical and remedial care and services made available under the plan, to the end that, by July 1, 1975, comprehensive medical and remedial care and services will be furnished to all eligible individuals.

5. The following is a description of the general approaches that will be used to assure that the medical and remedial care and services are of high quality, and a partial description of the standards established by the State to assure high quality care.

   a. An advisory committee on medical care, newly appointed, has members of both licensed physician groups, doctors of medicine and doctors of osteopathy. There are also representatives of the dental, pharmaceutical, and nursing professions, as well as others interested in health care programs. Subcommittees from this principal advisory committee have been established and are holding meetings to advise on policy for attainment of high level care and the means for obtaining the established goals. This results in close working relationships with the providers of service and the professional organizations to which they belong.

   b. The legislation passed which implements the Title XIX program for Michigan (Act 321 of P.A. 1966) contains statements which identify the desire for quality care. It recognizes the one-to-one relationship between the patient or client and the person providing the professional services, whether it be the licensed physician, dentist, pharmacist, or other professional purveyor of services. In addition, this statute empowers the Department to assist whenever necessary to be certain that adequate services are provided to every eligible client. Services of the Crippled Children program will be utilized for children. County caseworker staff working with the nursing home administrators of their area and the medical consultant will recommend the appropriate facilities for chronic disease cases.

   c. The delineation of the responsibility of the fiscal intermediary (s) is stated in a manual of operation whereby there will be information or utilization of institutional beds, medical procedures, pharmaceuticals, appliances, and other appropriate adjuncts to care. The department has in its medical division full-time physicians, medical social consultants, and a pharmacist. There is a part-time dentist and ophthalmologist, regionally placed part-time physicians to assist in maintaining the level of service intended in the state and federal legislation.

   d. The services of special medical consultants such as in the medical field will be encouraged where feasible so that adequate diagnostic services and care will be provided in all instances.

   e. The mechanism of utilization review committees established for Title XVIII will be utilized to the fullest extent by Title XIX. The staff of the Department's medical division will work closely with these utilization review committees and will act in a consultative capacity where feasible.

   f. Where children are concerned, the Department is making provisions for coordination of medical services available to children so that children eligible under the Crippled Children's program and also Title XIX will be assured of receiving appropriate services through each program. Children eligible under the Crippled Children's program will continue to receive the services of that program.

   g. Agreement has been developed with the Vocational Rehabilitation Division of the Michigan Department of Education for communication and assignment of responsibility for the medical assistance available to eligible persons needing rehabilitation service and also a part of the Title XIX program.

   h. The Michigan State Medical Society has produced a publication "Hospital Utilization Review Manual" which was published in June of 1966 and has wide distribution to the medical staffs of hospitals. The reference provides a basis for judgment as to length of stay for inpatient care and the signs and symptoms and other data for a definitive diagnosis which also provides indication for need for admission to inpatient care. The reference document will be utilized by the department staff in evaluating services.

i. The Michigan State Dental Association is preparing a Children's Charter for Dental Care. The rough draft of this reference document provides another tool for judging quality of dental services.

j. The need to provide staff in local and regional offices to make available consultative and other appropriate services incident to medical judgments and necessary to assure quality service is a firmly established principle. Implementation of this principle is being held in abeyance pending finalization of a proposal by the Health Department.

k. It is planned that at the local and regional level, case conferences will be held as a basis for relating total needs of clients and the development of a plan for meeting these needs including medical needs. These case conferences will be attended by caseworkers as well as medical division staff.

l. It is recognized that preventive programs are important in the spectrum of comprehensive medical care. Screening procedures for example, sometimes provide early recognition of medical and dental needs. The Department will continually be working with agencies that sponsor preventive programs in a cooperative effort to assess the availability and adequacy of various types of care for persons eligible under the Department's Title XIX program.

HIGHLIGHTS OF MICHIGAN LAW TO IMPLEMENT TITLE XIX IN STATE:

Following is a summary of the benefits in S-900, approved by the Michigan legislature in August and signed by Governor Romney for the initial phase-in of Title XIX. Title XIX, an expansion of the present Kerr-Mills program, will provide more than $41 million in State and Federal aid to Michigan's medically indigent this year.

This measure became effective immediately.

The new bill will permit payments to welfare recipients and others without interruption as the existing programs are phased out and replaced by the new ones.

* * *

THE BILL DEFINES the medically-indigent as those able to sustain themselves on a day-to-day basis but unable to cope with major medical expenses. The Legislature (in HB 4003, effective September 1) set eligibility ceilings on income at $1900 for a single person and $2700 for a two-person family.

It makes categorical assistance recipients eligible for new benefits which include hospitalization, home and office physician services, prescription drugs, dental care, nursing home care and other services to be enumerated by the State Department of Social Services, which will administer the program. The department may set income standards for larger families.

The State will share the total cost of the programs equally with the U.S. Government.

* * *

MICHIGAN WILL SPEND an additional estimated $12.3 million this year on Medical Assistance to the Aged, which is being eliminated in steps by the new programs.

An additional $18 million is expected to be required next year to maintain this year's level of medical assistance. The amount does not include Aid to Dependent Children or other such welfare programs, however.

The new programs commit the State to provide medical services to residents who are temporarily absent from the State, provided they would otherwise be eligible. The bill allows full reimbursement to counties for taking care of non-residents who are hospitalized.

The bill was implemented with a $2 million appropriation for that purpose. Another $1.1 million was appropriated for administration.

Title XIX Film Offered by MSMS

Interested physicians and county medical societies may obtain a film from MSMS about Title XIX for use with community groups or at medical meetings.

MSMS members attending the 1966 Annual Meeting of the AMA had an opportunity to see the Title XIX film seminar produced by the American Society of Internal Medicine. This film is an excellent source of general information on Title XIX and its implications and is being recommended for exhibition to physicians.

Any county component society who may wish to use this film may apply to MSMS on loan. Write to MSMS, 120 West Saginaw, East Lansing.

Vote Nov. 8, Officers Urge

Interested in good government?

Thousands of physicians and their families are participating in community action and good government programs now as the Fall election nears.

There is a need now during this important election year for increased activities as the physician fulfills his community responsibilities, officials point out.

"Be sure to vote Nov. 8," urge MSMS officials.

Michigan voters this fall will select the following:

—U.S. Senator
—19 Congressmen
—Governor and Lieutenant Governor
—Secretary of State
—Attorney General
—38 State Senators
—110 State Representatives
—2 Supreme Court Justices
—2 to Michigan Board of Education
—2 to University of Michigan Board of Regents
2—to Michigan State University Board of Trustees
—2 to Wayne State University Board of Governors

TITLE XIX COSTS IN STATE

PROGRAM	ESTIMATED 1966-67 COSTS	PHASE-IN DATE
Hospital Services	$ 7.5 million	October 1, 1966
Physician Services (home and office calls)	17.7 million	January 1, 1967
Pharmacy Services (medicine, drugs)	10.1 million	January 1, 1967
Other Services (eye glasses, prosthetic devices, ambulances etc.)	2.2 million	April 1, 1967
Dental Services	4.3 million	April 1, 1967
TOTAL	$41.8 million	

New Study Links Fatal Accidents and Alcohol

Nearly half of all drivers killed in Illinois traffic accidents since Jan. 1 — including 60 per cent of teenage motorists — had been drinking, according to a preliminary report on a study made by the Illinois State Medical Society.

The report showed that more than half of all drivers who were killed after drinking had been drunk, under the legal definition of intoxication. Forty-five per cent of dead teen-agers who had been drinking fell into the same category.

Illinois law declares a person drunk when he has fifteen one-hundredths per cent of alcohol in his bloodstream. To reach that stage, says Julius Kowalski, M.D., chairman of Illinois State Medical Society public safety committee, requires seven ounces of liquor or seven twelve ounce bottles of beer in an hour for an 185 to 200 pound man.

The ISMS wants the drunk level lowered to one-tenth of 1 per cent of a gram — about five ounces of liquor or five beers in an hour. It also will ask Legislature to rule that any person who applies for a drivers license implies consent to take an alcohol test if asked to do so by a policeman. At present a person in Illinois may refuse to take the test.

Doctor Kowalski noted that the study does not attempt to determine what percentage of the persons who caused accidents were drinking.

STATE BOARD REVIEWING MSU 4-YEAR REQUEST

"The Bureau of Higher Education is reviewing MSU's request to approve establishment of a four-year medical school," according to Leon Fill, M.D., Detroit, Vice President of the State Board of Education and Chairman of its Medical Education Sub-Committee.

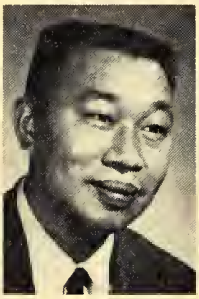
The request came from MSU President John A. Hannah, who said that the University's Board of Trustees instructed him to request approval of the State Board for a full degree program in human medicine.

The review will occur before the State Board takes formal action, Doctor Fill added.

The MSMS Council at its summer meeting supported the MSU move from its two-year pre-clinical program to full degree-granting status.

MSU accepted 26 students in September as its first medical school class. The MSU timetable, according to Dean Andrew D. Hunt, Jr., M.D., calls for another class of about 25 students next year, followed by a class of 54 students in 1968 when a planned Life Sciences Building will be completed.

Thanks to Grant, MHC Adds Man


B. H. YEP

Benjamin H. Yep recently joined the staff of the Michigan Health Council as full-time Anti-Cigarette Smoking Coordinator in Michigan. A native of Baltimore, Mr. Yep took his A.B. degree from Ohio Wesleyan University. In 1960, Michigan State University awarded him a Master of Arts in Education and Counseling. He then served on M.S.U.'s Bureau of Education Research and later became a specialist in Vocational Rehabilitation Counseling. In September of 1961, Mr. Yep became Director of Community Planning and Organization at Muskegon for the United Fund in cooperation with the United Cerebral Palsy Association. In September 1963, he returned to M.S.U. to pursue a doctorate in Special Education.

The Michigan Health Council recently received a $20,900 grant from the National Clearinghouse on Smoking and Health to coordinate the program and activities of the Michigan Council on Smoking and Health.

Funds Solicited To Help Africans Study Medicine

The African Medical Education Fund Inc., a subsidiary of the Detroit Medical Society, has renewed the scholarships of the four African medical students who received financial aid during the school year 1965-66. Two of these are studying at the University of Indiana, and two are at Howard University.

Leaders of the educational fund point out that several other African students have been investigated and are eligible and qualified for support.

"While our present financial resources do not permit us to meet these additional requests in full, we are conducting a fund-raising campaign to assist the students," points out Charles H. Wright, M.D., Detroit, President. The other officers of the AMEF are Horace Bradfield, M.D., Vice-President; Ethelene Crockett, M.D., Secretary, and Robyn Arrington, M.D., Treasurer, all of Detroit.

Marion W. Jocz, M.D., manager of medical services for Chrysler Corporation since 1954, has been appointed to a newly-created position of Chrysler executive medical director.

Suggests Role for MD In Sex Education

By Benjamin Jeffries, M.D., Chairman, MSMS Mental Health Committee

Parents and teachers would like answers to the timing and extent of sexual information. Parents are concerned in a range from infantile masturbation to the heterosexual and homosexual activity of children and adolescents.

One of the major reasons for this interest in sex education has been the social change that has been occurring in the past 25 years:

Increased assumption of responsibility for the individual by the community

Increased mobility with loss of individual and local identities and loyalties

The shifting of women from full-time homemaker to full-time wage earner

Increased personal income which emphasizes consumption and alters concepts of conservation

A major problem is the battle raging among the experts regarding sex education, leaving bewildered and confused parents and teachers in its wake.

Since the anatomy and physiology of reproduction are now generally taught, the issue is the social implication of sexual activity in children, particularly adolescents.

It is necessary to advise adolescents on the social responsibilities of sexual activity, pregnancy, and family formation, particularly since they appear to be in a state of flux.

The physician must emphasize that increased individual freedom implies increased individual responsibility. All too frequently, permissiveness is equated with licentiousness, which inevitably leads to individual, family, and community chaos.

We must assure the parent and educator that they have legitimate areas of responsibility for the imparting of knowledge about sex. They also have legitimate authority for setting the limits of behavior consistent with the ability and experience of the child or children. When this responsibility is neglected and this authority is unused, children become unsure, distrustful, and disrespectful.

It is up to us, as physicians, to recognize the difference between the destructive and constructive uses of sex education, and make sure that parents and teachers are equally aware.

Only the Wealthy? No!

It is said occasionally that the cost of a medical education is so high that only sons and daughters of the wealthy can afford to become physicians. Further, it is sometimes implied that this factor of cost is depriving medicine of superior students from lower income families.

The evidence does not support either conclusion.

On the question of family income levels, a 1963 study by the Association of American Medical Colleges indicated that 51 per cent of medical students came from families with incomes below $10,000, and 15 per cent of the medical students were from families with incomes below $5,000. A National Opinion Research Center, University of Chicago, study in 1962-63 found that 20 per cent of all college students are from families with incomes below $5,000.

These two studies indicate that medical education is possible for students of the poorer families.

It is true that more intellectually superior students come from higher income families and more of these can be expected to choose medicine as a career. For example, an AAMC study of National Merit Scholarship semi-finalists indicated that 48 per cent of them came from families in the income bracket above $10,000, compared with 49 per cent of medical students in that category.

Surveys also indicate that few medical students drop out for purely financial reasons.

On to Las Vegas

The average physician is now working a 58-hour week, and many of us are putting in hours far above that number. How, then, can we find the time to study and keep abreast of new medical knowledge?

One of the best and most efficient methods of checking up on new developments is to attend the annual Clinical Convention of the American Medical Association, in Las Vegas, November 27-30.

For the 20th consecutive year, the AMA will bring an impressive collection of new clinical knowledge to the practitioner.

The Clinical Convention promises to be a stimulating four days, worthy of the busy physician's time. I urge every physician to take advantage of this educational opportunity.

—AMA President Hudson

Readers Write:

(Editor's Note: The following article was submitted by Austin A. Aardema, M.D., Muskegon, a graduate of Hope College and a 1963 graduate of Wayne State University of Medicine. What are your views about your specialty? All such letters are welcome.)

I have always wanted to be a general practitioner, one who could care for the problems of the entire family. This was my vision at age nine but, of course, it has been modified somewhat by now.

My present vision of "total care" has definite boundaries which are determined largely by the knowledge of my own ability. I will not ask to do more than I know I can do.

My present practice involves general medicine, pediatrics, obstetrics, minor surgery, tonsillectomies and D and C's.

At least 85 per cent or more of all the medical problems which I encounter I can also provide for their definitive care. Those illnesses which require a higher degree of technical skill are willingly transferred to the care of the proper specialist. However, I try not to burden the specialists with the uncomplicated or routine problems in his field for which I have received very adequate training. A specialist must remain what he is and should be called upon only to serve where his special skills are needed.

In spite of increasing demands of general practice, I have found that I enjoy it more each year. I try to be intellectually honest with myself and I truly believe a generalist can provide his patient with excellent care. The habit of reading selected medical journals, the concentrated study of a postgraduate course, plus the never ending challenge of the patient who presents a hidden diagnosis or new symptom all serve to keep me medically stimulated and alert.

In our hospital the generalist is given privileges according to his demonstrated ability. Thus, I am able to admit, study and provide definitive care for the great majority of my patients.

It is distressing to see neighboring cities in Michigan who limit the privileges of the generalist as a group and refuse to recognize individual ability. To take away a physician's hospital privileges relegates him eventually to the practice of second class medicine. In time, even the most highly motivated physician would lose the intellectual curiosity and stimulation which drives him on towards continual education.

Above all, I enjoy the daily challenge of new problems involving people of all types and ages. As I pass from one examining room to the next, I may find a routine pre-natal exam or perhaps a well-baby exam. The next room might contain a patient with chronic congestive heart failure whose digitalis dose needs adjustment, and there is always the great challenge to any physician, the patient with psychosomatic problems.

It is highly gratifying to be able to see through the physical complaint, which served as a ticket for admission to my office, to the underlying emotional problem. This is often aided by my previous knowledge of the entire family situation.

Am I a dying breed?

I don't think so.

I believe the generalist will continue to be the front line of health care defense in our nation.

Submitted by: Austin A. Aardema, M.D.
1470 Peck Street
Muskegon, Michigan

Physicians annually contribute more than $5,000,000 to the financial support of medical schools, either directly or through the American Medical Association Education and Research Foundation.

SAMMOND PLEASANT LODGE

Offers to the elderly and chronically ill

Peace and quiet. Freedom of a large and richly furnished home and acres of lawns and wooded rolling grounds, scientifically prepared tasty meals, congenial companionship. A real

"Home away from Home"

Member of Michigan and American Nursing Home Associations. Highly recommended by members of the Medical Profession who have had patients at the Lodge.

For further information write to:

SAMMOND PLEASANT LODGE
124 West Gates Street
Romeo, Michigan
Plateau 2-2591

"All Interns are Alike"

It stands to reason. They all go through the same training; they all have to pass the same tests; they all have to measure up to the same standards; they all are underpaid, too. Therefore, all interns are alike.

That's utter nonsense, of course. But it's no more nonsensical than what some people say about aspirin. Namely: since all aspirin is at least supposed to come up to certain required standards, then all aspirin tablets must be alike.

Bayer's standards are far more demanding. In fact, there are at least *nine specific differences* involving purity, potency and speed of tablet disintegration. These Bayer® standards result in significant product benefits including gentleness to the stomach, and product stability that enables Bayer tablets to *stay* strong and gentle until they are taken.

So next time you hear someone say that all aspirin tablets are alike, you can say, with confidence, that it just isn't so.

You might also say that all interns aren't alike, either.

BAYER
ASPIRIN
FAST PAIN RELIEF
Genuine

ORANGE FLAVORED
BAYER
ASPIRIN
FOR
CHILDREN
SAFE-TIGHT CAP
Genuine
50 TABLETS

Life Planning Should Begin Early

By W. Fred Mangan

Life planning means just what it says. Every professional man should realize that it involves a lot more than just financial planning, for if it meant only that, it would be called "financial planning." These words suggest that everyone should establish a goal, a sort of strategic objective toward which a lifetime of endeavor may lead. The methods used to achieve this goal become the tactics necessary for accomplishing life planning.

Various examples can be used to demonstrate different attitudes and objectives. There are doctors who work at their profession only to make a living and do a lot of hunting and fishing as they go along. Other doctors work hard to make a lot of money and spend it *now*. There are doctors whose main purpose seems to be to accumulate.

All too often many doctors do these things without ever thinking of a goal — they simply grind along, assuming that everything will come out right in later years. This seldom happens because most good things just don't happen accidentally, but require management of time and effort. A lifetime of work may easily be misdirected if objectives and goals are not established early. This can be a tragedy late in life.

Economic Appraisal of Doctor's Lifetime

Each doctor in his own way usually manages to develop a system of making money-ends meet on some sort of a cycle. The less able ones run their affairs on a day to day, or week to week basis. With more experience, and often learning the facts of life from negative results of trial and error, the cycle is lengthened to a month to month, and less often, a year to year basis. Long range planning that covers the life cycle is difficult for most to comprehend because of many unknown factors and the ways of change that our society passes through. Most planning looks backwards first and learns about the past. This process gives us some means of predicting what may happen in the future — and it's toward the doctor's future that we are directing our concern. Before attempting to consider the many "life planning" facets available to the professional man, we are going to review his probable economic lifetime in long term prospective.

To a large degree, the economic lifetimes of most doctors follow a similar pattern.

For purposes of this discussion, we shall divide the economic lifetime of a doctor into three phases: The earlier, middle and later working years.

The Earlier Working Years

Approximate ages can be used to mark the earlier working years. Perhaps 30 to 45 will serve as a general guide. The starting point of 30 is the average age that most doctors begin practice. This is based on his finishing high school at 18, four years of college, four years of medical school, a year of internship, two to three years of specialty training and possibly a tour of duty in the armed forces. Doctors in general practice, of course, are likely to start in the late twenties, while specialists do well to start in the early thirties.

A doctor in this age group might be described as going through the period of acquisition. During this time he will acquire the tools of his profession, such as instruments, equipment, furnishings and sometimes even an office building; he acquires a home and the furnishings that go with it, automobiles and some luxury items such as boats, motors, and, of course, he begets children.

Thus burdened, he is fortunate that any risk-taking agencies will relieve him of an important part of the risk load. For example, life insurance can be used to protect his family at minimum cost during the early years.

A point to be remembered is that during a doctor's early working years there is maximum resilience in the face of adversity. During this time of life, adverse economic trends can be more readily overcome, but this doesn't mean that great risks are in order. Every good poker player knows that he wins more consistently when he avoids taking

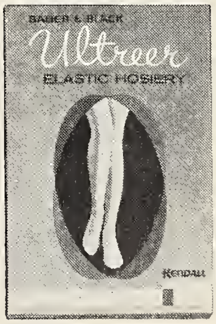
(Continued on Page 860)

Mr. Mangan is Vice President, Professional Management, Black & Skaggs Associates, Battle Creek.

You prescribe elastic stockings.
She won't wear them.
Now what?

Ultreer™

Elastic Stockings so sheer they look like support hose. Both Ultreer and support hose are sheer, shapely, cool and comfortable. But that's where the similarities end. New Ultreer fits firmly and evenly over the entire leg. Gives true therapeutic compression necessary to relieve varicose veins and other leg disorders. They provide the therapy you prescribe. The fashion and economy she demands. Ultreer stockings have a new low price. So low, she can afford two pairs of Ultreer instead of one pair of regular elastic stockings. There'll be no disagreements there. Ultreer stockings are as comforting to her purse as they are to her legs. New Ultreer are the elastic stockings doctors and women can agree on.



KENDALL
BAUER & BLACK SUPPORTS DIVISION

the long chances; the wise man does not assume that lady luck is working only for him.

Middle Working Years

The period of middle age is especially difficult to define precisely because beginning and end may vary widely for different individuals. Nevertheless, as an approximation, the period from 45 to 55 will serve.

For a doctor this is his period of maximum productivity. This is also the time when his cost of living is highest. Toward the end of this time his physical stamina recedes from its peak and his future earning power will depend to a greater extent on his knowledge and judgment than on his energy and muscular power.

This is the period when the economic harvest should be reaped in order to provide for later years. Usually, responsibilities are greater in middle age — children require schooling, sometimes at great expense; during these years aged parents may become dependent; maximum living costs incidental to professional standards are encountered; and that inevitable dependent, one's older self, must be provided for.

Obviously, great risks should be avoided during this period. It is no time for a doctor to be casting dice with fortune, because the time remaining for him to stage a "come back" is limited and many a doctor has discovered to his sorrow that the resilience of youth goes when youth departs.

Later Working Years

This period in a doctor's life may extend from, say 55, 60, 65 or 70. Economic progress, even with reduced professional income, can be very substantial in the years above 55 and frequently is, as children have been educated, home and furnishings have been paid for, a pattern of life has been established and requirements are not as great.

A more or less serious impairment of health is an economic factor of considerable importance and is all too probable during this time. Large risks of serious losses should be carefully avoided.

Fortunately, responsibilities usually decrease during the later years. Children usually have become economically independent, and few men of this age have parents still dependent on them. A doctor can then devote more attention to conserving assets for his own period of retirement, and planning for a life of less pressure.

When to retire is the question that most men must face sooner or later. As a general rule, a doctor will practice and earn enough to care for his own personal needs, as long as health permits.

Comparatively few doctors talk and dream of retiring — particularly those who have passed the age of 55. Most of them want to ease off and get to do some of the things they have always wanted to do, but missed because they have been so busy working. If this is what he wants, the solution is found by trending the practice toward semi-retirement, to be active and reasonably busy, and yet to have time off. This is often more difficult to carry out than complete retirement.

Projection of Lifetime Medical Income

Based on PM averages for physicians, a doctor's lifetime income will fall along lines on this table.

	Solo	Members of Partnerships
Net Professional Income	$1,067,896	$1,339,833
Other Income	123,996	97,302
Personal Tax Deductions	96,637	112,359
Living Expenses	490,327	565,129
Life Insurance Premiums	71,387	84,249
Income Taxes	283,644	397,556
Possible ESTATE	249,897	277,842

Age and Medical Income

Based on a PM study of medical income by ages, the average net professional income of doctors practicing alone increases in almost a straight line from his first year in practice until he reaches age 45. It maintains a plateau for the next six or seven years and then starts falling at about the same rate it increased in the early years.

The average net professional income of partners increases at about the same rate and for about the same length of time, but the plateau extends for fifteen to twenty years. It falls no faster at that point than did the income of the individual practitioner ten to fifteen years earlier.

How Much Should Be Saved

How much should be saved must take into consideration a doctor's goals and state of his health. PM averages for "spending-savings" tell us what the physician spends for living, for life insurance premiums, pays in income taxes and retains via net gain. This gives us a management tool of what others save and spend, and sets guidelines for a savings target.

The money spent for living and paid in taxes is gone forever. The life insurance premiums for

(Continued on Page 862)

what
time
is it?

For the past
two years
there's been
one new case
of active tuberculosis
reported for every
four thousand
of U.S. population.

it's time
to tine.

Tuberculin,
Tine Test
(Rosenthal) Lederle

Available in 5's and 25's.
Order now
from your pharmacist
or your Lederle
representative.

LEDERLE LABORATORIES, A Division of American Cyanamid Company, Pearl River, New York Lederle
414-6—4046R

permanent insurance have cash values that represent savings. Net gain is savings in one of many ways. Each case is different, but the key figures are how much he earns (net professional income) and how much of it he retains via cash value of intangible assets and net gain of real assets.

Personal Spending and Savings Based on Net Professional Incomes

Net Professional Income	Living Expenses	Life Insurance Premiums	*Income Taxes	Net Gain
$10,000	$ 8,050	$ 825	$1,242	—$ 307
15,000	9,350	1,260	2,279	1,511
20,000	11,500	1,525	3,498	2,472
25,000	13,500	1,650	4,975	3,625
30,000	15,250	1,800	6,616	4,764
35,000	16,500	2,300	8,676	6,184
40,000	18,000	2,460	11,020	7,550

---

*Computed using joint tax rates and five exemptions

COMMENTS: Non-professional sources of income and non-professional tax deductions are not included.

DID YOU KNOW THAT?

A constant flow of new prescription drugs from competing manufacturers results in rapid obsolescence of the industry's products: New products from different companies constantly move into the largest sales positions. Example: None of the top five diuretic products of 1951, or their manufacturers, ranked in that group by 1960.

* * *

The average retail price of a prescription is $3.41: 58 per cent of the prescriptions filled cost $3 or less, 74 per cent of the prescriptions filled cost $4 or less. Only about one in 100 costs $10 or more.

* * *

Today's better drugs take less of your health dollar than those of 1944: U.S. Department of Commerce published reports show consumers' direct purchases of drugs and sundries declining as a share of the total medical care dollar: 1944—22.8¢; now—17.2¢. An industry economist estimates that prescription drugs account for only about 11¢ of the medical care dollar.

KINGSWOOD HOSPITAL, Michigan's finest
and newest facility for intensive, short-term
treatment of voluntary
neuropsychiatric patients.

Philip N. Brown, M.D.
Medical Director

Marvin J. Lawrence, F.A.C.H.A.
Administrator

KINGSWOOD HOSPITAL
10300 W. EIGHT MILE ROAD
FERNDALE 20, MICHIGAN Telephone: Area 313 398-3200

IT'S AS PLAIN AS THE NOSE ON HIS FACE.

UP TO 10–12 HOURS' CLEAR BREATHING ON ONE TABLET

Dimetapp® Extentabs®

(Dimetane® [brompheniramine maleate], 12 mg.; phenylephrine HCl, 15 mg.; phenylpropanolamine HCl, 15 mg.)

In sinusitis, colds, or U.R.I., Dimetapp lets congested patients breathe easy again. Each Extentab brings welcome relief all day or all night, usually without drowsiness or overstimulation. Its key to success? The Dimetapp formula — Dimetane (brompheniramine maleate), a potent antihistamine reported in one study to have elicited side effects as few as the placebo,* teamed with decongestants phenylephrine and phenylpropanolamine — in a dependable 10- to 12-hour form.

Contraindications: Patients hypersensitive to antihistamines. Not recommended for use during pregnancy.

Precautions: Until the patient's response has been determined, he should be cautioned against engaging in operations requiring alertness. Administer with care to patients with cardiac or peripheral vascular diseases or hypertension.

Side Effects: Hypersensitivity reactions including skin rashes, urticaria, hypotension and thrombocytopenia have been reported on rare occasions. Drowsiness, lassitude, nausea, giddiness, dryness of the mouth, mydriasis, increased irritability, or excitement may be encountered.

Dosage: 1 Extentab morning and evening, or as needed.

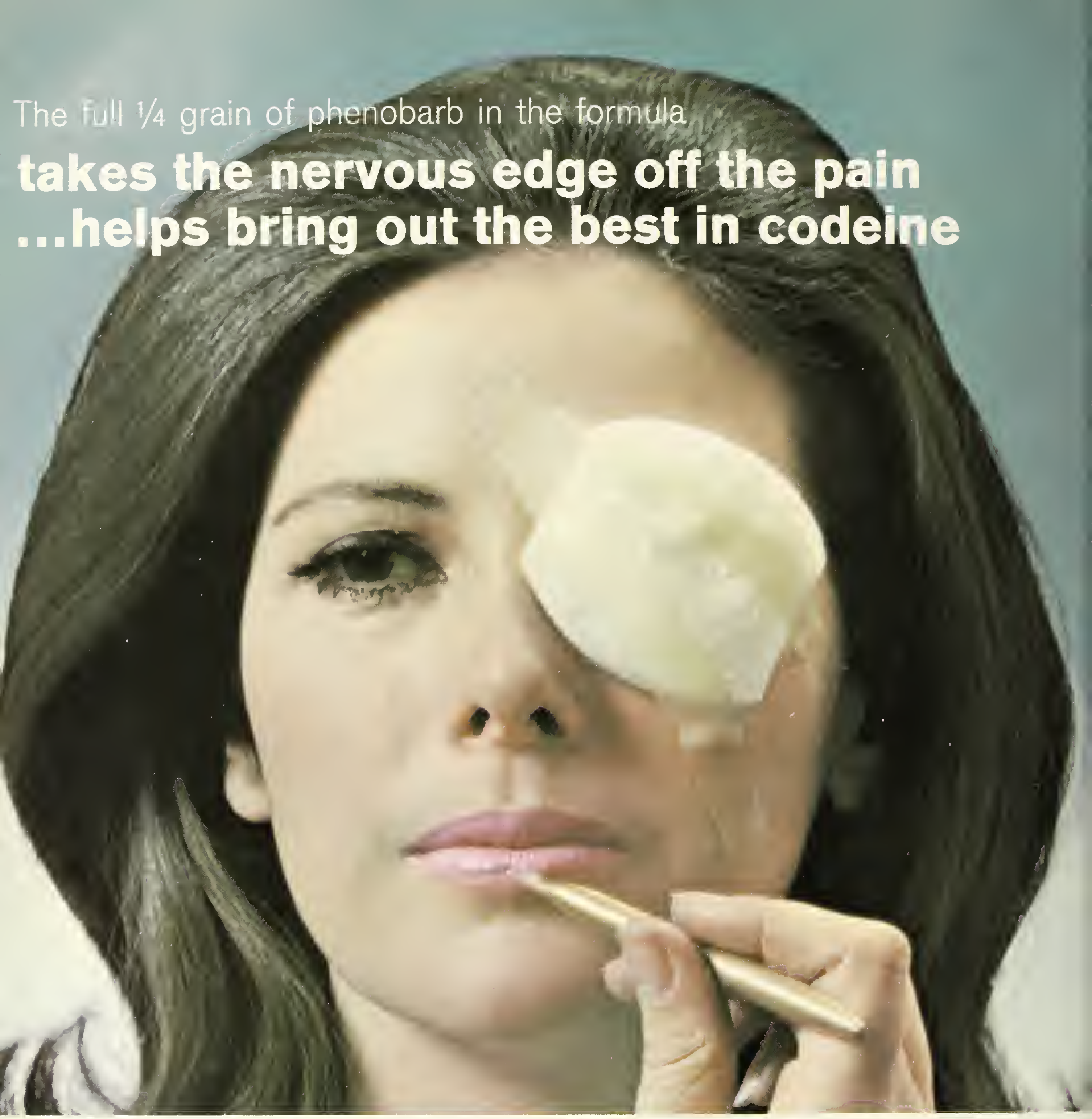
Supplied: Bottles of 100 and 500.

Also available: Dimetapp® Elixir for conventional *t.i.d.* or *q.i.d.* dosage. See package insert for further details.

A. H. ROBINS CO., INC.
RICHMOND, VIRGINIA 23220

A·H·ROBINS

*Schiller, I. W., and Lowell, F. C.: New England J. Med. 261:478, 1959.


The full ¼ grain of phenobarb in the formula
takes the nervous edge off the pain
...helps bring out the best in codeine

Phenaphen® with Codeine the only leading compound analgesic that calms instead of caffeinates

Each capsule contains:

Phenobarbital (¼ gr.)	16.2 mg.
(Warning: may be habit forming)	
Aspirin (2½ gr.)	162.0 mg.
Phenacetin (3 gr.)	194.0 mg.
Hyoscyamine sulfate	0.031 mg.
Codeine phosphate	¼ gr. (No. 2), ½ gr. (No. 3), 1 gr. (No. 4)
(Warning: may be habit forming)	

Contraindications: Hypersensitivity to any ingredient.

Precautions: As with all phenacetin-containing products, avoid excessive or prolonged use.

Side Effects: Side effects are uncommon—nausea, constipation, and drowsiness have been reported.

A·H·ROBINS

A. H. ROBINS CO., INC., Richmond, Va. 23220

Welcome, New Members . . .

Robert H. Bentley, M.D., 7220 Gratiot Avenue, Detroit 13.

Charles R. Boyce, M.D., Henry Ford Hospital, Detroit 2.

Vernon C. Butler, M.D., 201 Marilin, Eaton Rapids

John K. Drumm, M.D., 1420 St. Antoine St., Detroit.

Ralph Fargotstein, M.D., St. John's Hospital, Detroit.

Charles W. Fountain, M.D., 23851 Ford Rd., Dearborn.

Marvin Gordon, M.D., Detroit Memorial Hospital, 1420 St. Antoine, Detroit.

Salah E. A. Gouda, M.D., Annapolis Hospital, Wayne.

James Greenwood, M.D., 115 N. First St., Alpena.

Edgar Grunwaldt, M.D., 2336 Bronson Blvd., Kalamazoo.

Angelow A. Kambouris, M.D., 744 David Whitney Bldg., Detroit.

Maximilian Kelin, M.D., 8233 W. Chicago Blvd., Detroit.

Edward J. Klimkowski, M.D., 17301 W. Eight Mile Rd., Detroit.

Boleslaw Krawczyck, M.D., Fennville.

Karl T. Kristen, M.D., Mt. Carmel Mercy Hospital, Detroit.

William J. Ledger, M.D., 1418 Maxwell St., Ann Arbor.

Richard J. Lubera, M.D., 13369 Robson, Detroit.

David Migdoll, M.D., 15361 Plymouth Rd., Detroit.

Antonina Miller, M.D., 810 David Whitney Bldg., Detroit.

John Morovitz, M.D., 113 E. Williams, Owosso.

Ian H. L. Murray, M.D., 474 Fisher Bldg., Detroit.

Armando Ortiz, M.D., 763 David Whitney Bldg., Detroit.

Andrew D. Pitonyak, M.D., St. Joseph Mercy Hospital, Pontiac.

Benjamin R. Ramos, M.D., 12950 W. Chicago Blvd., Detroit.

Eduardo Rivera, M.D., 432 E. Hancock, Detroit.

J. Speed Rogers, M.D., 1322 E. Michigan Avenue, Suite 214, Lansing.

William A. Rye, M.D., Upjohn Company, Kalamazoo.

Feyyaz Salman, M.D., 1221 Orchard Rd., Essexville.

Zwi Steiger, M.D., VA Hospital, Dearborn.

Ruth H. Strang, M.D., 4500 E. Huron River Dr., Ann Arbor.

Miles Taylor, M.D., 550 Eastland Professional Bldg., Detroit.

Robert B. White, M.D., 2801 W. Maple, Birmingham.

Tibor Bezeredi, M.D., 2845 Whitewood, Ann Arbor.

Thomas L. Carter, M.D., 2131 Georgetown Blvd., Ann Arbor.

Burton Jaffe, M.D., 1245 Creal Crescent, Ann Arbor.

David H. Jones, M.D., 822 Loyola Dr., Ann Arbor.

Brooks H. Sitterley, M.D., 1209 Roosevelt Blvd., Ypsilanti.

Ricardo A. Yuzon, M.D., 140 Elizabeth Lake Rd., Pontiac.

Melvin Clark, M.D., 4558 Marlborough Rd., Okemos.

King L. Tan, M.D., 367 Old Perch Rd., Rochester.

Elaine Hartje Tan, M.D., 367 Old Perch Rd., Rochester.

John A. Ingold, M.D., 3066 Lakeview Drive, Ann Arbor.

Keith Marshall Holmes, M.D., Suite 32, Medical Village, 31815 Southfield Road, Birmingham.

Julian Allen, M.D., 4113 Telegraph Road, Bloomfield Hills.

Mehmet Ekinci, M.D., Pontiac State Hospital, Pontiac.

Constancio A. Ramirez, M.D., St. Joseph Hospital, Mt. Clemens.

Robert M. Amato, M.D., X-ray Dept., Hurley Hospital, Flint.

Jose A. Fernandez, M.D., 806 W. Sixth Avenue, Flint.

Fredric M. Somach, M.D., 720 W. Sixth Ave., Flint.

Lassia Z. R. Van Hise, M.D., 101 N. Main St., Berrien Springs.

Eleanore Kovich, M.D., MSU Health Center, East Lansing.

Ram Advani, M.D., 1840 Wealthy St., S.E., Grand Rapids.

Judith L. Meyer, M.D., 833 Lake Drive, S.E., Grand Rapids.

Enver Aydogan, M.D., 1141 S. Rose St., Kalamazoo.

Marvin D. Silver, M.D., 24308 Washington Court, Apt. 29, Farmington.

(Continued on Page 866)

NEW MEMBERS/Continued

Issa S. Ajlouni, M.D., Chrysler Corporation, Jefferson Avenue, Detroit.

Murray Brickman, M.D., 673 Fisher Building, Detroit.

Atila N. Can, M.D., 25210 Grand River, Detroit.

Maria V. Cserhalmi, M.D., 1302 Beaconsfield, Detroit.

Burton S. Epstein, M.D., 18215 Greenfield, Detroit.

Robert H. High, M.D., Henry Ford Hospital, Detroit.

Frank J. Hildner, M.D., Henry Ford Hospital, Detroit.

Kamil Imamoglu, M.D., Detroit General Hospital, Detroit.

John D. Kondomerkos, M.D., 33020 Palmer Road, Wayne.

Herman Kanter, M.D., 980 Whitmore, Detroit.

George V. LeRoy, M.D., 1800 Tuxedo, Detroit.

Andreas Marcotty, M.D., Henry Ford Hospital, Detroit.

George Mikhail, M.D., Henry Ford Hospital, Detroit.

Miriam V. Morales, M.D., Detroit General Hospital, Detroit.

George P. Olson, M.D., Chrysler Corporation, Detroit.

Leo Parnagian, M.D., 868 Fisher Building, Detroit.

Manuel Sarmiento, M.D., Providence Hospital, Southfield.

Donald V. Schultz, M.D., 23100 Cherryhill, Dearborn.

Donald L. Salva, M.D., 3675 East Outer Drive, Detroit.

Taisja Z. Tworek, M.D., 2 Woodside Park Blvd., Pleasant Ridge.

Noel A. Von Glahn, M.D., 19075 Middlebelt, Livonia.

Jay Victor, M.D., 14575 Southfield, Allen Park.

Patrick A. Villani, M.D., 1025 David Whitney Building, Detroit.

W. C. Vander Yacht, M.D., 20211 Ann Arbor Trail, Dearborn.

Carlos Zevallos, M.D., 5800 West Fort St., Detroit.

Nasser Zohoury, M.D., 18800 Woodward Avenue, Detroit.

Edward P. Scheidler, Jr., M.D., 10610 Peninsula Drive, Traverse City.

Kenneth R. Dorner, M.D., 2909 East Grand River, Lansing.

LOOK- Are **YOU** Protected? . . .

By the Comprehensive Group Insurance plans sponsored for its members by the Michigan State Medical Society? . . .

Life Insurance . . .
2 plans available including coverage for dependents

LONG TERM DISABILITY . . .
with renewal guarantees

SPECIAL ACCIDENT . . .
Death & Dismemberment up to $100,000

PROFESSIONAL OVERHEAD EXPENSE . . .
Up to $1500 monthly

BEN P. STRATTON AGENCY, INC.
Administrators

P. O. Box 547
Lansing, Mich.
48903

NEW MEMBERS/Continued

James W. Kern, M.D., 620 Susan Street, Ann Arbor.

Paul C. Linnell, M.D., 701 North Logan, Lansing.

Judith A. Ericsson, M.D., 719 New Center Building, Detroit.

Robert N. Ashby, M.D., 201 Lafayette Avenue, S.E., Grand Rapids.

George A. Ellis, M.D., 16 East Hannum Boulevard, Saginaw.

Leland M. Bitner, M.D., Saginaw County Hospital, Saginaw.

Lawrence F. Sheppard, M.D., 23700 Van Dyke Ave., Warren.

Hermann A. Ziel, Jr., M.D., Michigan Department of Health, Lansing.

Don G. Davis, M.D., 701 North Logan St., Lansing.

Armand M. LaSorsa, M.D., Manistique.

Higinio S. Esparza, M.D., 537 Millard St., Saginaw.

Maurice E. Hunt, M.D., 1941 Gates Street, Reese.

Alfonso A. Villegas, M.D., 2111 Marshall Court, Saginaw.

Computer at the Bedside?

As to the evaluation of medicines for efficacy and safety, the computer is not the final and perfect answer, useful though it is. What the physician feels and perceives at the bedside of his patient may not fit into the square, or oblong or round hole of the punch card; but his observations are often a surer guide to the usefulness of a particular medicament for a particular patient. In the interest of the patient — that individual so unique that there is not another entirely like him in the whole wide world — we must be careful lest the scientific pendulum swing too far in the direction of mechanistic technology. — *J. Mark Hiebert, M.D., to University of Kansas Pharmacy Colloquium, April 13, 1966.*

The health services industry, employing approximately 4,000,000, is the fastest-growing field of employment in the U.S. It is now the third largest employer, topped only by agriculture and construction, and it could be No. 1 by the early 1970s.

SYMPOSIUM ON ADOLESCENCE

NEW ORLEANS, LOUISIANA DECEMBER 1-3, 1966

Approved for 15 hours credit by the American Academy of General Practice

Sponsored by the

DIVISION OF PSYCHIATRY and COMMUNITY MENTAL HEALTH CENTER OF TOURO INFIRMARY

supported by a National Institute of Mental Health Grant

GUEST LECTURERS INCLUDE:

Dana Farnsworth, M.D., Director of Student Health Services at Harvard University, Cambridge, Mass.

Irwin Kraft, M.D., Professor of Child Psychiatry at Baylor Medical School, Houston, Tex.

John Schimel, M.D., Associate Director of William Alanson White Institute of Psychiatry, Psychoanalysis and Psychology, New York, N.Y.

George Tarjan, M.D., Professor of Psychiatry and Program Director of Mental Retardation Project at University of California in Los Angeles, Calif.

Carroll Witten, M.D., President-Elect of American Academy of General Practice, Louisville, Ky.

AMONG TOPICS TO BE DISCUSSED:

"The Physician's Role in Mental Retardation"

"Parents of Problem Children"

"Handling of Adolescents by General Practitioners"

"Sexual Morality — A College Dilemma"

"Drugs in the Treatment of Children and Adolescents"

"Learning Problems of the Adolescent"

"Adolescence and Social Mores"

"Talking About Sex with Adolescents"

"Religious Conflicts"

Symposium will be held at the Fontainebleau Motor Hotel, 4040 Tulane Ave.
Early hotel reservations are recommended.

GENE L. USDIN, M.D.
Director of Psychiatric Services
Touro Infirmary
1400 Foucher Street
New Orleans, Louisiana 70115

Enclosed is my registration fee of $20 for the SYMPOSIUM ON ADOLESCENCE to be given December 1-3, 1966 at the Fontainbleau Motor Hotel. (Checks should be made payable to Touro Infirmary)

Name ______________________________

Address ______________________________

THE BEGINNING OF
MEDICAL EDUCATION

Mike Sydow, of Harbor Springs, is curious about some clumsy-looking medical instruments of a century ago, as he walks through the Healthmobile at Petoskey, popular summer resort community. Mrs. Sanders Frye, wife of a Petoskey physician, is patient to explain the early medical instruments to the 11-year-old youngster. (Petoskey News-Review photo)

MSMS Healthmobile "Sells" Careers

Rock 'n roll belted forth from the big trailer parked in Detroit's Northland Shopping Center. Teen-agers, attracted by the lively sounds, gravitated in its direction.

"'A Hundred Years of Health Progress,'" one read aloud from the sign on the trailer's side. "'Michigan State Medical Society. Healthmobile.' What's that?"

Shoulders were shrugged. Then another kid said, "We heard something about it at school. They said we should come and see it. . . ."

A car pulled up. Out jumped an attractive and purposeful young woman. She stormed into the trailer and the rock 'n roll was stilled.

* * *

THE KIDS OUTSIDE, sensing something going on, hung around.

Two rather sheepish boys, carrying a stack of records, emerged from the trailer's back door, the young lady bringing up the rear. One lad said politely, over his shoulder:

"I'm awfully sorry, miss. We didn't mean to make trouble."

"That's all right," she told them. "Next time, though, don't just march in and take over the public address system without asking the permission of the hostess in charge."

"Wait a moment!" she added, and as they turned, she handed each one a pamphlet, "better read these if you're going to keep up smoking the way you do. Find out what it does to you."

She turned to the other watching teen-agers with a smile. "Why don't you come in and look around? It's free! And you'll find it interesting. . . ."

In the background, much softer, less dominating music started up over the public address system.

The boys and girls looked at one another, then tentatively they climbed the steps signposted "Entrance" . . . .

* * *

FACING THEM WAS an eye-catching painting of an army doctor in the epauletted uniform of the nineteenth century, studying a hefty, fallen patient in a humble cabin.

The caption stated this was William Beaumont, M.D., discovering the process of digestion in Michigan. In 1822, on Mackinac Island, he had attended a wounded French Canadian voyageur, Alexis St. Martin, whose chest and abdomen had been ripped open by gunshot. Although the patient lived for many years, the gash never closed properly and through the "window" the young doctor was able to observe what happened to food as it passed through the stomach, thus making a notable contribution to medical research.

The painting by artist Dean Cornwell fascinated the teen-agers, as did an old-fashioned doctor's bag full of vials of colored liquids and sinister-looking collection of ancient surgical instruments.

"Wooden stethoscopes. . . ," someone remarked.

One youngster, moving ahead, beckoned to a girl whose wide smile revealed some complicated orthodontia in progress.

"You think you got troubles," he told her, "how'd you like some of those old gadgets in your mouth?"

As the others swarmed around, she looked, shivering, at a graphic display of early devices for correcting cleft palates.

(Continued on Page 870)

(This article about the MSMS Healthmobile was written by Helen Lillie, of Washington, D.C., a medical writer for several national and European journals. She became interested in the museum-on-wheels when she saw it in Detroit.)

SQUIBB NOTES ON THERAPY

Breast-feeding and the "modern mother"

Despite a mild resurgence of interest in the importance of breast-feeding a few years ago, many women today do not choose to nurse their young. This is for a variety of reasons—social, economic, cultural and sometimes medical. In such cases the physician's task is to find the most suitable means of preventing lactation and easing the pain of breast engorgement.

The means of therapy

The value of hormone therapy for this indication is of course well established. Both androgen and estrogen are known to inhibit the production and secretion of the lactogenic hormone by the anterior pituitary. As estrogen levels decline sharply at parturition, lactogenesis is established. When androgen and estrogen are administered to the patient before the release of the lactogenic hormone lactation and breast engorgement are usually prevented.

The time of therapy

The time of administration of this combined medication is crucial; it must be given early enough to suppress the pituitary prolactin and last long enough to permit physiologic readjustment during the puerperium. Excellent results are most often seen when therapy is administered before the onset of the second stage of labor.

However, factors other than effectiveness must also be considered. The agent selected should not interfere in any way with parturition, subsequent uterine involution and the restoration of normal ovarian cyclic function. Furthermore, it should not cause rebound breast engorgement or other manifestations of hormonal imbalance.

A balanced formulation

Providing single-dose therapy for the prevention of lactation and breast engorgement, Deladumone OB is a potent androgen-estrogen combination with a prolonged action. The optimal balance of androgenic and estrogenic hormones achieved in this preparation minimizes the disadvantages inherent in single hormone therapy, such as rebound breast engorgement. Involution of the uterus and resumption of menstrual cycles are not affected.

As reported in a recent published study (Roser, D. M.: Obstet. & Gynec. *27*:73, 1966), Deladumone OB provided good suppression of breast engorgement in 95.3% and suppression of lactation in 81.1% of 86 obstetrical patients. These results are in general agreement with those of many earlier investigations; in several studies this injectable androgen-estrogen combination proved to be superior to oral medication.

Dosage:

As a single injection of 2 cc. before the onset of the second stage of labor.

Contraindications:

Established or suspected mammary cancer or genital malignancy.

Precautions and Side Effects:

Certain patients may be unusually responsive to either estrogenic or androgenic therapy. In such individuals virilization, uterine bleeding or mastodynia may occur.

Supply:

Deladumone OB, providing 180 mg. testosterone enanthate and 8 mg. estradiol valerate per cc., is available in 2 cc. Unimatic® disposable syringes and in 2 cc. vials. Both preparations are dissolved in sesame oil, with 2% benzyl alcohol as a preservative. *Before use, consult product literature for full prescribing information.*

Deladumone® OB

Squibb Testosterone Enanthate (180 mg./cc.)
and Estradiol Valerate (8 mg./cc.)
Single-dose injection for lactation inhibition

SQUIBB *'The Priceless Ingredient' of every product is the honor and integrity of its maker.*

HEALTHMOBILE/Continued

"I was born with one of those," remarked another girl. "I must tell my mother to come and see this. . . ."

"Hey! Look at the naked lady!"

* * *

MADE OF PLASTIC, she was also transparent and had rows of buttons with indicators down either side of her glass case. An adult visitor was already pushing them, one by one, and as he did so the "lady's" nervous system lit up, then her muscles, and in turn her various organs.

Someone pushed the gall bladder and commented, "Now we know where the President had his operation. . . ."

The young woman who had sent away the unauthorized disc jockies came down the passageway. "That's the most popular exhibit in the Healthmobile," she told the students. "Now, let everyone have their turn pushing the buttons. And look over these pamphlets before you go. Take as many as you like."

* * *

SHE WATCHED AS they helped themselves to AMA booklets and brochures.

A large apple-cheeked young man, his hands already full of material on diabetes, heart disease and strokes, asked solemnly, "Have you anything on cancer detection?"

Another lady, wearing a white coat, appeared from the back and handed out a pamphlet. "Here you are." She smiled, noticing the bulky textbook on chemistry under his arm.

As the young people moved around the exhibit and finally left, the two women found time for a few words. Both doctors' wives, they were members of the local Auxiliary, responsible for manning the Healthmobile.

"What happened?" asked the new arrival.

"Those two boys? They just moved in on me. They simply took over the record player and started to put on their own records. One said he'd heard about the Healthmobile at school. The other claimed his doctor had told him to go and see it!"

"You could have called the police. And there's a guard outside."

"They weren't making any trouble, and let's face it, that frightful so-called music did bring those other kids around."

The first woman looked quickly at a report sheet on the desk. "Kids have been coming right along without benefit of rock 'n roll."

The Michigan State Medical Society's Healthmobile — the first of its kind in America — was built to celebrate the Centennial meeting in Detroit in the fall of 1965.

Since then, the big, 50-foot trailer has been on display at shopping centers, hospital grounds, and fairs throughout the state, staying a week here and then moving on.

In May 1966, it crossed over to Wisconsin as an honored exhibit at the Wisconsin State Medical Society's 125th Anniversary meeting.

* * *

THE HEALTHMOBILE has never missed an "engagement" whatever the weather. It opened in Adrian when temperatures were 17 below, and it was well attended in 5 below weather in Detroit.

Ralph T. Wills, the member of the Michigan State Medical Society's staff in charge of the Healthmobile's arrangements, says that, between working out complicated booking requests and operating on the "show must go on" philosophy, he's beginning to feel like P. T. Barnum. And indeed the amount of public interest this unique exhibit has engendered would have done credit to that great showman.

Attendance has averaged 350 to 600 each day. A record 3,925 visited the Healthmobile in Muskegon during a ten-hour Health Fair. Over 60 per cent have been young people and school children. Even

This exhibit greets the Healthmobile visitors as they enter the door. It features a sketch of the Detroit Odd Fellows Hall, where the first meeting was held 101 years ago, and a photo of the present MSMS headquarters. "A Century of Service in Medicine" is the theme that relates the excellent service record of MSMS to the public.

A CENTURY OF SERVICE IN MEDICINE

on the chilliest days, the trailer has never stood empty for long. The AMA pamphlets available on the way out have been picked up at the rate of over 2,000 a week, and there has been an enviable amount of publicity in the local press, radio and television.

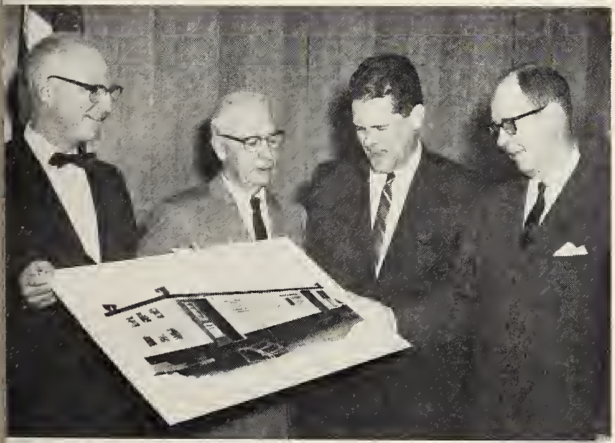
* * *

ONE SECRET OF the Healthmobile's success is that it is taking its message to the people. It is always located at a point where shoppers or tourists or the curious are likely to be. Once inside, it offers colorful, authentic exhibits sufficiently intriguing to stimulate every taste.

These exhibits have developed. They have been added to, edited, touched up in response to the public's reaction. One addition that pulls together the whole story of Michigan's medical progress consists of two displays — one listing the diseases most prevalent in 1865 (and their treatment, if any), the other listing the common diseases today, with a summary of the tools at modern doctors' disposal.

The lists give food for thought. A hundred years ago, the most killing sickness in Michigan came from dysentery, typhoid fever, tuberculosis, scarlet fever and pneumonia. Treatments were limited to bed rest, liquid diets, cold baths, tonics, leeches, "a change of air" and opium to kill pain.

Today, mankind's worst health enemies are heart disease, cancer, strokes, accidents and diabetes. Among the treatments are the wonder drugs, radiation and surgery, to say nothing of previously inconceivable methods of rehabilitation. To this list the Healthmobile has added two significant words: EDUCATION and FAITH.



A check for $10,500 from the Sears-Roebuck Foundation to help equip the Healthmobile is received by the Michigan Health Council, which is allied with the Michigan State Medical Society in the project. Left to right are Richard U. Byerrum, Michigan Health Council President; Harold H. Hiscock, M.D., MSMS Council Chairman; Donald Cudworth, Chicago, Sears-Roebuck Foundation executive, and Donald Bunting, Lansing Sears-Roebuck official.

* * *

SOME OF THE MILESTONES on the road to medical progress are shown in special relation to Michigan. Brucellosis (undulant fever), once a serious threat to both men and animals, was brought under control by the late I. Forest Huddleston through his work at Michigan State University. Ben Burmester, a Michigan State University professor and a United States Department of Agriculture scientist, discovered that a virus was responsible for leukemia in birds, thus opening up research possibilities for work on dogs — and people. Many bone surgery techniques worked out by MSU veterinarians under the chairmanship of Wade Bringer, D.V.M., have also been used successfully on humans. Another leader in the field of modern sanitation is Walter L. Mallman, MSU professor of microbiology.

A bizarre reminder of a past medical mystery is a collection of wallpaper samples, in the curlicued designs fashionable in 1870. These represent the scientific sleuthing of the early Michigan State Health Department, the findings described in a dusty tome entitled *Shadows from the Walls of Death* by R. C. Kedzie, M.D.

This alert Michigan physician traced several deaths from slow arsenic poisoning to the use of these wallpapers, which contained enough of the lethal chemical to pollute the air of whatever room they decorated. Because of his investigations, American wallpaper manufacturers eliminated arsenic from their products. (This wasn't so in Europe, and readers will recall that, only a few years ago, Claire Booth Luce, when ambassador to Italy, developed a mysterious sickness that was traced to the arsenic-soaked trappings of her bedroom walls.)

A hundred years ago, the City of Detroit had wooden water pipes, and one of these is displayed in the Healthmobile, together with a textbook on water pollution written as far back as 1885.

* * *

THERE IS ALSO a bottle of plain iodized table salt. This represents a victory over simple goiter — once so prevalent locally that it was known as "the Michigan disease." It was caused by a chemical lack of balance in the soil, preventable through the simple addition of iodine to salt. The

State Medical
HEALTH

The Healthmobile began its travels at an East Lansing shopping center in October, 1965, under the sponsorship of the Ingham County Medical Society and its Auxiliary. A book of old medical records is examined by Robert Trimby, M.D., Ingham president then; Mrs. Joseph Heckert, Ingham Auxiliary president then, and Oliver B. McGillicuddy, M.D., MSMS past president and now secretary.

research work of Dr. Cy Young brought this to light in 1920.

Many of the Healthmobile's visitors have related the exhibits to themselves. In Port Huron, one of the first men to go through stood for a long time before a photographic exhibit of modern open heart surgery, background for a heart-lung machine and other surgical equipment relating to the dramatic possibilities of today's heart repair.

"I've got one of those valves in my own heart," he told the hostess, pointing to the prosthetic devices. "It's what makes it possible for me to stand here today."

* * *

PEOPLE HAVE also shown a thoughtful preoccupation wth an exhibit on the beginnings of medical education in Michigan. Beside some photos of Detroit's Harper Hospital at its beginning in 1868 are some figures on how long it took to qualify as a doctor a hundred years ago.

The average period of training across the nation was sixteen weeks. But in Michigan it was twenty-four.

"Guess they must have picked up a little more know-how in that extra two months," someone remarked, "or a lot of us wouldn't have our grandparents alive today."

Michigan's first medical school opened in 1850, and exhibits show how the medical schools of Michigan State University, the University of Michigan and Wayne State University are still planning for expansion.

Also on display are projects such as a Junior Vision Screener to test preschool children's eyesight, and a blood derivative program illustrating the process by which life-saving blood serums are manufactured from human placenta.

Two of the state's drug companies, the Upjohn Company of Kalamazoo and the Parke, Davis & Company of Detroit, have exhibits, and there's a handsome "Man in Space" indicating where medicine may go from here.

A fine statue, beautiful in itself and expressing the spiritual approach to medical progress, has been created for the Healthmobile by the noted sculptor Marshall Fredericks of Cranbrook.

* * *

THE TRAILER was built by the Marlette Coach Company of Marlette, Michigan, and loaned to the medical society. The cost of equipping the health-museum-on-wheels was covered through grants from Merck, Sharp and Dohme of West Point, Pennsylvania; the Sears Foundation, MSMS and the AMA.

Mr. Rembrandt C. Hiller, vice president of the Sears Roebuck Foundation, says of the Healthmobile that it is "the most unique and outstanding health educational program that the Sears Roebuck Foundation has considered for a great number of years."

* * *

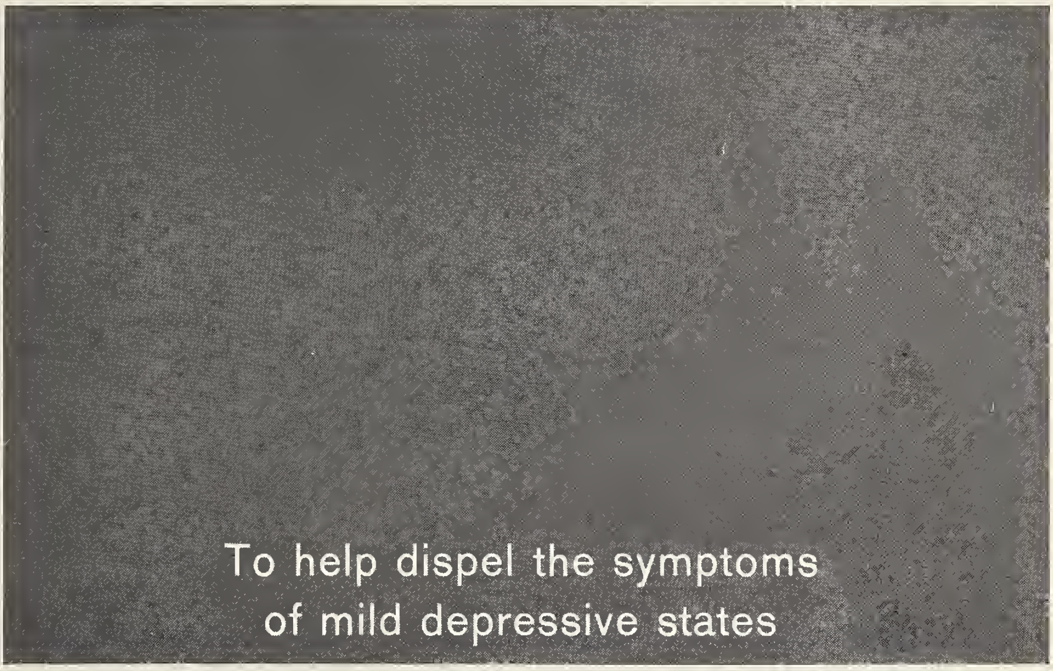
LOCAL UTILITY companies have generously given their services free to maintain the Healthmobile's 40 feet of heavy-duty No. 6 three-wire cable, its 112-220 volt exterior circuit, fused to 100 amps, and its total wattage, which approximates 4500 to 5000.

The trailer must not only be kept lighted and heated, but each exhibit has its own moving caption in lights describing the contents. The "naked lady" seems to be lethal to light bulbs — or perhaps it's because she is lit up so often!

There is the public address system so unconventionally utilized by the teen-agers, and many other small but vital electrical items such as facilities for a quick snack or cup of coffee for the hostess in charge, and a plug-in heater in the back office.

The Healthmobile's travels around the state have been charted in response to requests from local medical societies who have also made themselves responsible for its promotion. For example, in both Adrian and Port Huron, the Mayor took time to go through it, and a number of other local celebrities have also taken an interest. Doctors

(Continued on Page 876)



CONSIDER **DEXAMYL**® FIRST
brand of dextroamphetamine sulfate and amobarbital

Often within the hour, 'Dexamyl' works to help dispel such symptoms as apathy, pessimism, loss of interest and initiative, and lack of ability to concentrate.

Formulas: Each 'Dexamyl' Spansule® capsule (brand of sustained release capsule) No. 1 contains 10 mg. of Dexedrine® (brand of dextroamphetamine sulfate) and 1 gr. of amobarbital, derivative of barbituric acid [Warning, may be habit forming]. Each 'Dexamyl' *Spansule* capsule No. 2 contains 15 mg. of Dexedrine (brand of dextroamphetamine sulfate) and 1½ gr. of amobarbital [Warning, may be habit forming].

The following is a brief precautionary statement. Before prescribing, the physician should be familiar with the complete prescribing information in SK&F literature or *PDR.*

Precautions: Use with caution in patients hypersensitive to sympathomimetics or barbiturates and in coronary or cardiovascular disease or severe hypertension. Do not use in patients taking MAO inhibitors. Excessive use of the amphetamines by unstable individuals may result in a psychological dependence; in these instances, withdraw the medication. Use cautiously in pregnant patients, especially in the first trimester. *Side effects:* Insomnia, excitability and increased motor activity are infrequent and ordinarily mild.

SMITH KLINE & FRENCH LABORATORIES

new small size

15 Gm.
FOR TOPICAL USE ONLY
SYNALAR®
[FLUOCINOLONE ACETONIDE]
CREAM
0.01%
SYNTEX
LABORATORIES, INC.
Palo Alto, Calif.
CAUTION
Federal law prohibits dispensing without prescription
MADE IN U.S.A.

Synalar® 0.01
(fluocinolone acetonide) **cream**
15 Gm.

for even greater economy in office or hospital practice

the superiority
topica
with the

Now you can prescribe as little or as much Synalar Cream 0.01% as is needed for a particular therapeutic problem in a size that permits the greatest economy for your patient. The new 15 Gm. tube, for example, is best suited for short-term therapy and for small sites. For more extensive body areas prescribe the 45 Gm. tube—a size that's also ideal for your treatment table. And the 120 Gm. jar is most economical for hospital use. Thus, with Synalar Cream 0.01%, you have the superiority of a modern topical corticosteroid shown to be more effective than 1% hydrocortisone[1-3] plus the economy that makes therapy practical for use in more dermatologic conditions, in long-term maintenance, with occlusive dressings in resistant cases, and in extensive area involvement.

Contraindications: Tuberculous, fungal, and most viral lesions of the skin (including herpes simplex, vaccinia, and varicella) Not for ophthalmic use Contraindicated in individuals with a history of hypersensitivity to any of its components **Precautions:** 1. *General*—Synalar Cream 0.01% is virtually nonsensitizing and nonirritating Where severe local infection or systemic infection exists the [illegible] of systemic antibiotics should be considered, based on susceptibility testing While topical steroids have not been reported to
have an adverse effect on pregnancy, the safety of their use on pregn
females has not absolutely been established. Therefore, they should not
used extensively on pregnant patients, in large amounts, or for prolong
periods of time. 2. *Occlusive dressing method*—With occlusion of extens
areas, systemic absorption of the corticosteroid may occur, and suita
precautions should be taken. Occasional patients may show contact se
tivity to a particular dressing material or adhesive. Miliaria, folliculitis,
pyodermas have been seen infrequently with the use of this technique.
development of infection requires appropriate antibacterial therapy and
continuation of the occlusive dressing method Local atrophy and str
have been reported with protracted occlusive dressing therapy. While les
relapses can be expected to occur in many psoriatic patients, remissi
may persist for several weeks to several months in favorable cases.
patient whose psoriasis is in an active stage, with recent appearance of r
lesions, may not be a good candidate and may show early relapse. Sc
plastic films may be flammable, and due care should be exercised in th
use. Similarly, caution should be employed when such films are used or
left near children to avoid the possibility of accidental suffocation. **S**
Effects: Side effects are not ordinarily encountered with topically appl
corticosteroids. As with all drugs, however, a few patients may react u
vorably to Synalar under certain conditions. **References:** 1. Cahn, M. M.,
Levy, E. J : J New Drugs 1 262 (Nov.-Dec.) 1961. 2. Meenan, F. O.: J I
Med Ass 52.75 (Mar.) 1963. 3. Robinson, H. M., Jr., Raskin, J , and Dunse
W J. R.: Southern Med J 56 797 (Jul.) 1963.

of a modern
corticosteroid
economy of
hydrocortisone

Now...a choice of 3
economical sizes

SYNALAR
CREAM
SYNTEX

120 Gm. jar 15 Gm. tube 45 Gm. tube

fluocinolone acetonide — an original steroid from
SYNTEX
LABORATORIES INC., PALO ALTO, CALIF.

have given of their limited leisure to be on hand to answer questions from the public. Hostesses have been members of the local Auxiliaries, helped out by Grey Ladies, nurses, medical assistants and willing friends.

These volunteers have all kept records of attendance and of public reactions, sometimes their own. ("I feel like a fool in this white coat!" an unknown scrawled at the bottom of one page, and below it another anonymous helper added, "So do I!")

* * *

ALL THE REPORTS agree that the most popular exhibit is the lit-up "naked lady." "It's a very gutty exhibit," some said. "It's educational, sure, and it's also slightly morbid. And visual. Besides, people can participate in it, pushing those buttons."

Runner-up in popularity is the dental exhibit showing advances from handcarved artificial teeth to cleft palate correction.

One hostess in Battle Creek noted that "the older visitors seem most talkative and often tell about their illnesses."

"The kids think the Healthmobile is terrific," wrote someone in Pontiac. Nearly every report mentions either a high school science class or a pre-med group or Boy Scout troop having gone through and showing much interest and knowledge about health and the body.

Adults on a professional level — teachers, doctors and dentists, pharmacists and nurses — all feel the exhibits give much needed publicity to advances in medicine and also to present-day public health problems.

* * *

"THE PEOPLE ASKED for more information on all phases of medical education," stated a Pontiac hostess, adding, "The most popular give-away pamphlets seem to be about smoking and overweight." Closely following in public interest are leaflets on allergies, diabetes and how to get X-rays. Hostesses noticed that requests for specific information went up in relation to press and radio stories on such things as outbreaks of tuberculosis or diphtheria in the vicinity.

"All the children are becoming health conscious, and this project is of great educational value," wrote Mr. John W. English, superintendent of the Southfield Public Schools.

An encouraging sign of the times was the number of queries the hostesses had from young people who were considering health careers. "It is the hope of the Michigan Health Council that the Healthmobile will stimulate the interest of many families . . . in the health-related professions," says Richard U. Byerrum, Ph.D., president of the Michigan Health Council and dean of Michigan State University's College of Natural Science. "Today, as never before, we are experiencing a shortage of trained people — which could result in a deterioration of general medical service unless additional people can be attracted to these fields."

* * *

NO SINGLE INDIVIDUAL at the Michigan State Medical Society will take credit for the evolution of the Healthmobile.

"We wanted something that would carry on the educational publicity we'd had through our Centennial celebrations," says C. Allen Payne, M.D., Grand Rapids, who was general chairman of the Michigan State Medical Society Centennial.

The Healthmobile Facts Sheet sent ahead to every local medical society, after it has spelled out the basic requirements on electrical equipment, hosting duties, cleaning, publicity, how the locks work and where the keys should be kept, ends significantly: "If major emergency, phone R. T. Wills . . . collect if necessary" and gives his phone numbers both at home and at work.

From the Berrien County Medical Auxiliary comes a typical summing-up for the achievements of the Healthmobile:

"We think the Healthmobile speaks for itself, and the Michigan State Medical Society can take pride in offering this Michigan museum-on-wheels to the public. Too often, we (doctors and their wives) . . . take our knowledge of medicine or the profession for granted. To the lay public, however, it can be a mysterious, frightening unknown, too complex to comprehend, or something to avoid because of the cost involved. Simply put, the medical profession, through the Healthmobile, is saying to the communities it visits, 'Here we are. This was our beginning about a hundred years ago and what we could offer you. You are made aware in subsequent exhibits that the scope and knowledge of medicine is ever growing, and you realize that this is a small example of the products medicine has for you and humanity.'

"Medicine today is more than a person's family physician and local hospital, and the exhibits helped point this out."

The American Medical Association Council on Medical Education forecasts that by 1975, the nation's medical schools will be graduating 10,000 MDs annually, compared with 7,409 graduated in 1965.

HEALTHMOBILE VISIT "HAILED" IN NORTH

The tour of the Healthmobile through the Upper Peninsula during the summer had "something special" about it.

The MSMS Healthmobile is the center of considerable interest in every community it travels to, but in the Upper Peninsula the Healthmobile had some special glamour. Not all of the more-common Lower Peninsula features make the U.P. swing—and the physicians, auxiliary members, teachers and students in the Upper Peninsula did look forward to the Healthmobile with perhaps some added interest and enthusiasm.

Following are some of the comments resulting from the Upper Peninsula circuit:

"Sault Ste. Marie, third oldest city in the United States, welcomed the Healthmobile's 'A Century of Service in Medicine' at the peak of the tourist season and residents and tourists, many from Canada, viewed the exhibits with especially keen interest as they were reminded of the history of the area."

Mrs. Earl S. Rhind, President
Women's Auxiliary
Chippewa-Mackinac Medical
Society

* * *

"Located on the campus of Michigan Technological University in Houghton, and open to the public daily including Sunday, over 5,000 residents and students toured this remarkable medical museum on wheels. Each of the 27 school districts within the tri-county area was represented by one or more groups for specially conducted tours. Members of the Woman's Auxiliary served as lecturers and guides. Packets of pamphlets were distributed to each school so that each school library would be supplied with health and career information. Physicians of the Tri-County Medical Society volunteered to serve in the evening hours.

"The Healthmobile brought the history of Michigan medicine directly to the people of the Upper Peninsula, giving them the opportunity to see for themselves the progress that has been made and the accomplishments that may be looked for in the future. It up-graded the 'Doctor Image' that has been in decline for the past few years."

Mrs. Maurice D. Meier, Director
District 8 MSMS Woman's Auxiliary
Healthmobile Coordinator
Upper Peninsula

"The Health Mobile was in Iron Mountain during our Upper Peninsula Meeting. The Gray Ladies who were present informed me that public reception was very good. The Health Mobile certainly has a lot of educational value and was very well received by all those who had an opportunity to go through."

W. H. Huron, M.D., Chairman
Public Relations
Iron Mountain

* * *

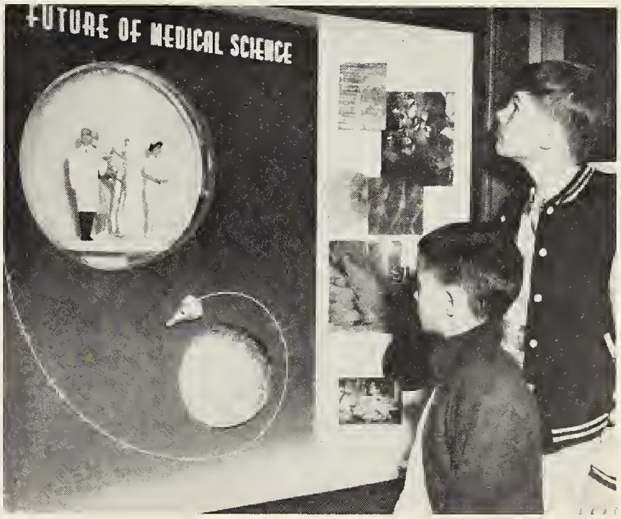
"The Health Mobile created more interest and attracted more visitors in the Marquette-Alger area than was anticipated. Approximately 1000 people toured the exhibits, all age groups being represented about equally. Some were merely curious. Some were intrigued and fascinated by the displays. Most were caught up enough to ask varied and interesting questions. Delightedly and enthusiastically we answered the many questions about health careers which, interestingly enough, seemed to come mostly from young parents although the teenagers also evinced a lively interest. This seemed rewarding and hopefully promising.

"The Auxiliary members performing the hostessing duties thoroughly enjoyed the experience. They felt the facts they learned about the history and future of Michigan medicine would enhance their efforts in recruiting for health careers."

Mrs. George Wilson
Marquette

* * *

"History has always been represented in different and varied ways. But, the history of medi-



A display about the "Future of Medical Science" in the Michigan Healthmobile holds the attention of two school boys, William D. Cody, left, of Escanaba, and Philip Van Elsacker, of Ford River, who visited the Healthmobile on its stop in Escanaba in the Upper Peninsula. (Escanaba Daily Press Photo) cine as depicted by the Michigan State Medical Society's Healthmobile, was indeed one of the best.

"Its age appeal in Escanaba was universal. Youngsters with their looks of rapture and interest, returned to visit it time after time. So did the oldsters with their looks of reminiscence and recollection. And, so did all of the other in between ages. They came in twos, tens, and sometimes twenties or more. All entered with curiosity and doubts, all left with a feeling of enrichment.

"The Healthmobile was education, stimulation, and inspiration, all rolled into one."

Mrs. Donald N. Fitch, President
Delta-Schoolcraft County Medical Auxiliary

* * *

"Hardly any one knew what to expect of the Healthmobile when it come to a Cadillac shopping center on August 1, for a four day visit. Seeing this mobile unit proved that a look is worth a thousand words. One 17-year old girl said, 'I didn't know this Healthmobile had so much information on health careers. I'm going back to get my girlfriend. We both hope to take nurse's training.' The members of the Wexford-Missaukee Medical Society and the Woman's Auxiliary and their friends enjoyed this experience and have a feeling of pride in being able to assist with bringing this medical museum to the people of the Cadillac area."

Mrs. Gregory P. Moore
Cadillac

THE BEGINNING OF MEDICAL EDUCATION

Members of the woman's auxiliaries of the Michigan State Medical Society, across the state, have played a key role in the travels of the Michigan Healthmobile. Here, Mrs. Hugh Allott, wife of a Sault Ste. Marie physician, describes some of the interesting visitors and provocative questions to Ralph T. Wills, MSMS director of community relations. (Sault Ste. Marie Evening News photo)

"The recent visit to Charlevoix by the MSMS Healthmobile was received with enthusiastic response by a large number of local citizens and visiting summer friends.

"By special arrangement it was possible to have the medical museum set up at the main corner of Charlevoix during the weekend of the Venetian Festival when many extra thousands of people were in town. There were many favorable comments from both old and young on the exhibits and a large number of pamphlets on health careers, etc., were given out."

Gilbert Saltonstall, M.D.
Michigan State Board of Registration in Medicine

* * *

"The demand for trained high caliber personnel in medical and related career fields is ever present.

"The presence of the Michigan Medical Society's Health Mobile in the Copper Country gave the Tri-County Medical Society an opportunity to stimulate interest among students and other young people in careers in the medical field.

"The Health Mobile was located on the campus of Michigan Technological University, the enrollment of which is approximately 3,800.

"Although it is impossible to definitely state the impact that the Health Mobile had on stimulating young people to consider careers in medical fields, nevertheless, it did acquaint them with the exulting possibilities that exist and reminded them that the opportunity to begin study for such careers was available in this area."

Kenneth E. Rowe, M.D.
Hancock

FULL-TIME EMERGENCY DEPARTMENT POSITIONS

Two positions available in four-man group to cover large emergency service on a full-time basis.

Remuneration on a separate-billing, fee-for-service basis. A generous base-line income is guaranteed.

Regular hours. Highly qualified medical staff with intern and residency training programs. Hospital located in north-east Detroit adjacent to the Grosse Pointes.

Program under the direction of a full-time chief of the Emergency Department.

Program to go into effect January 1, 1967.

For further information apply to — Medical Director Saint John Hospital, 22101 Moross Road, Detroit, Michigan 48236.

SQUIBB NOTES ON THERAPY

MOLECULAR REMODELING–

laboratory exercise or clinical necessity?

More than twenty-five years have passed since the discovery of the diuretic activity of sulfanilamide started pharmacologists on a succession of molecular remodelings to find the ideal diuretic.

Diuresis—a sought-after clinical effect from an unwanted side effect

It started in 1937 when a clinician reported that the administration of a sulfonamide was sometimes accompanied by an unexplainable side effect—metabolic acidosis.[1] Three years later the side effect was explained. The sulfonamide radical of sulfanilamide inhibited carbonic anhydrase,[2] the enzyme responsible for converting carbon dioxide and water to hydrogen ions and bicarbonate ions.

Later, other investigators showed by dog experiments that metabolic acidosis probably resulted when the inhibition of carbonic anhydrase upset the exchange of hydrogen and sodium ions, causing increased excretion of sodium as the bicarbonate.[3]

It was twelve long years after the first report of the unexplainable side effect (metabolic acidosis) that it was finally shown that large doses of sulfanilamide administered to edematous patients were indeed capable of promoting diuresis.[4] However, the possibility of toxic effects from its prolonged use and its relatively weak diuretic action made it impractical for clinical use as a diuretic.[5]

Because the inhibition of carbonic anhydrase seemed to be the key to effective diuresis, investigators began to look for more potent enzyme inhibitors—in the hopes that they would be more effective diuretics.

The most important of these early compounds, acetazolamide, enjoyed several years of fairly wide clinical use.

Its carbonic anhydrase inhibitory activity was several hundred times greater than that of sulfanilamide.[6] The increase in inhibitory activity, however, increased not only the excretion of sodium and bicarbonate ions, but also the excretion of potassium.[7] And, like its predecessor, acetazolamide precipitated mild acidosis. Its prolonged use could result in hypokalemic acidosis.[7]

The 'thiazides'—an answer to the metabolic acidosis caused by carbonic anhydrase inhibition

Despite the fact that the sulfonamide group appeared to be responsible for carbonic anhydrase inhibition which in turn appeared to be responsible for diuresis, investigators began to synthesize compounds with structural alterations to the sulfonamide group.

The first major breakthrough came with the synthesis of chlorothiazide. Altering the sulfonamide group did indeed alter the ability of chlorothiazide to inhibit carbonic anhydrase—it was only 1/10th as potent as acetazolamide in inhibiting the enzyme.[8] Despite the drop in inhibitory potency, however, chlorothiazide proved to be an effective diuretic—an observation that led to the conclusion that its diuretic action was due to some mechanism other than its action on carbonic anhydrase.[9, 10]

For effective diuresis, chlorothiazide was administered in daily dosages ranging from 250 to 2000 mg.[11] It increased the excretion of sodium and chloride; and, to a lesser extent, potassium and bicarbonate.[11] The excretion of potassium appeared to be maximal at higher dose levels at which, theoretically, the carbonic anhydrase inhibitory effect is more active.[11] Its prolonged use, therefore, could sometimes result in metabolic hypokalemic, hypochloremic alkalosis.[7]

Naturetin—effective diuresis with more favorable electrolyte balance

Other thiazides followed—with improvements being aimed at two particular areas: 1. attempts to increase diuretic action in relation to the milligram potency of the drug, and 2. attempts at a more favorable sodium/potassium ratio in the urine, i.e., to decrease the excretion of potassium while maintaining the excretion of sodium.[12]

One of these, Naturetin, Squibb Bendroflumethiazide, has made advances on both these points. "By adding a 3-benzyl radical to hydroflumethiazide a rather dramatic reduction in dose range is accomplished. With this drug, effective sodium excretion is obtained with doses between 2.5 and 10 mg., which is a 200 to 1 ratio as compared to chlorothiazide..."[13]

Moreover, due probably to its virtual lack of carbonic anhydrase inhibition, Naturetin (bendroflumethiazide) has been shown to cause less potassium and bicarbonate loss and less alteration in urinary pH than either chlorothiazide or hydrochlorothiazide.

Naturetin is outstandingly effective not only in establishing, but also in maintaining, excretion of retained fluid in edematous patients. And its duration of action is sufficiently prolonged to allow a single daily administration in most patients. Naturetin is also an effective antihypertensive agent.

Contraindications: Severe renal impairment; previous hypersensitivity.

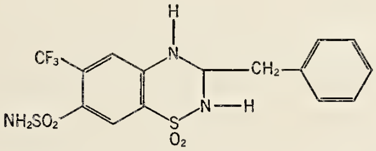
Warning: Ulcerative small bowel lesions have occurred with potassium-containing thiazide preparations or with enteric-coated potassium salts supplementally. Stop medication if abdominal pain, distension, nausea, vomiting, or G.I. bleeding occur.

Precautions: The dosage of ganglionic blocking agents, veratrum, or hydralazine when used concomitantly must be reduced by at least 50% to avoid orthostatic hypotension. Electrolyte disturbances are possible in cirrhotic or digitalized patients.

Side Effects: Bendroflumethiazide may cause increases in serum uric acid, unmask diabetes, increase glycemia and glycosuria in diabetic patients and may cause hypochloremic alkalosis, hypokalemia; cramps, pruritus, paresthesias, and rashes may occur.

Supplied: Naturetin (Squibb Bendroflumethiazide) 5 mg. and 2.5 mg. tablets. Also available Naturetin c̄ K [Squibb Bendroflumethiazide (5 or 2.5 mg.) with Potassium Chloride (500 mg.)]. For full information, see Product Brief.

References: **1.** Southworth, H.: Proc. Soc. Exper. Biol. & Med. *36*:58, 1937. **2.** Mann, T. and Keilin, D.: Nature *146*:164, 1940. **3.** Pitts, R. F., and Alexander, R. S.: Am. J. Physiol. *144*:239, 1945. **4.** Schwartz, W. B.: New England J. Med. *240*:173, 1949. **5.** Friedberg, C. K., in Moyer, J. H., and Fuchs, M.: Edema Mechanisms and Management, Philadelphia, W. B. Saunders Co., 1960, p. 259. **6.** Cumming, J. R.; Tabachnick, E., and Seelig, M., in Moyer, J. H., and Fuchs, M.: op. cit., p. 254. **7.** Werko, L., in Moyer, J. H., and Fuchs, M.: op. cit., p. 188. **8.** Beyer, K. H., Jr., in Moyer, J. H., and Fuchs, M.: op. cit., p. 274. **9.** Maren, T. H., and Wiley, C. E.: J. Pharmacol. & Exper. Therap. *143*:230, 1964. **10.** Earley, L. E., and Orloff, J.: Ann. Rev. Med. *15*:149, 1964. **11.** Fuchs, M., and Mallin, S. R., in Moyer, J. H., and Fuchs, M.: op. cit., p. 276. **12.** Ford, R. V., in Moyer, J. H., and Fuchs, M.: op. cit., p. 290. **13.** cited in Fuchs, M., and Mallin, S. R. (ref. 11): op. cit., p. 283.



Naturetin®
SQUIBB BENDROFLUMETHIAZIDE
to reduce excess fluid
or high blood pressure

SQUIBB 'The Priceless Ingredient' of every product is the honor and integrity of its maker.

Suggests Better Ways To Communicate

"You cannot communicate *at* people."

So said Philip Lesly, President, Philip Lesly Company, at the recent annual AMA Public Relations Institute.

Mr. Lesly continued, "Ideas and information cannot be forced into the minds of people whose inclinations, backgrounds and interests are not amenable to them."

This point was stressed further as Mr. Lesly declared:

"All efforts to communicate must start with the interests and background of the audience. Unless it can satisfy the listener that it is meeting his needs, the communication either will not exist — or it will irritate. Starting with his demands and desires — getting inside his skin — we must get our purposes onstream with him and couch our message in ways that he will consider to be his."

Mr. Lesly described several other social and psychological factors that affect communications between groups.

He said, "There appears to be almost an explosion of new interest and insights in these areas, ranging from the sweeping hunches of Marshall McLuhan to the minute i-dotting in many college research papers. Somewhere between these is the area of imaginative but practical judgments that will determine how we can function on behalf of our clients and employers in the near and distant future."

Following are some other quotes from Mr. Lesly:

"The nature of the intended audience determines whether communicaton takes place or even whether it is met with hostility.

"Our rising education level is rapidly increasing the sophistication and skepticism with which people react to communications efforts. People have infinitely more mental experience to bring to bear in reacting to everything that is said to them.

"Every individual has a psychological equilibrium that he seldom allows to be upset. This is why people can be exposed for years to new ideas that completely refute what they were taught in their childhood and go on having faith in the attitudes of their ancestors. On all matters, they have an unwillingness to absorb ideas that conflict with their secure attitudes."

Among the suggestions offered by Mr. Lesly were these points:

"Approaches to each of the media should be tailor-made. There should be no shotgun techniques. What is effective and correct for one medium is almost certainly not suitable for another.

"In each category of media, the most effective outlets should be used — the ones that have the highest force of influence on the audiences and the most effective utilization of the time and investment involved.

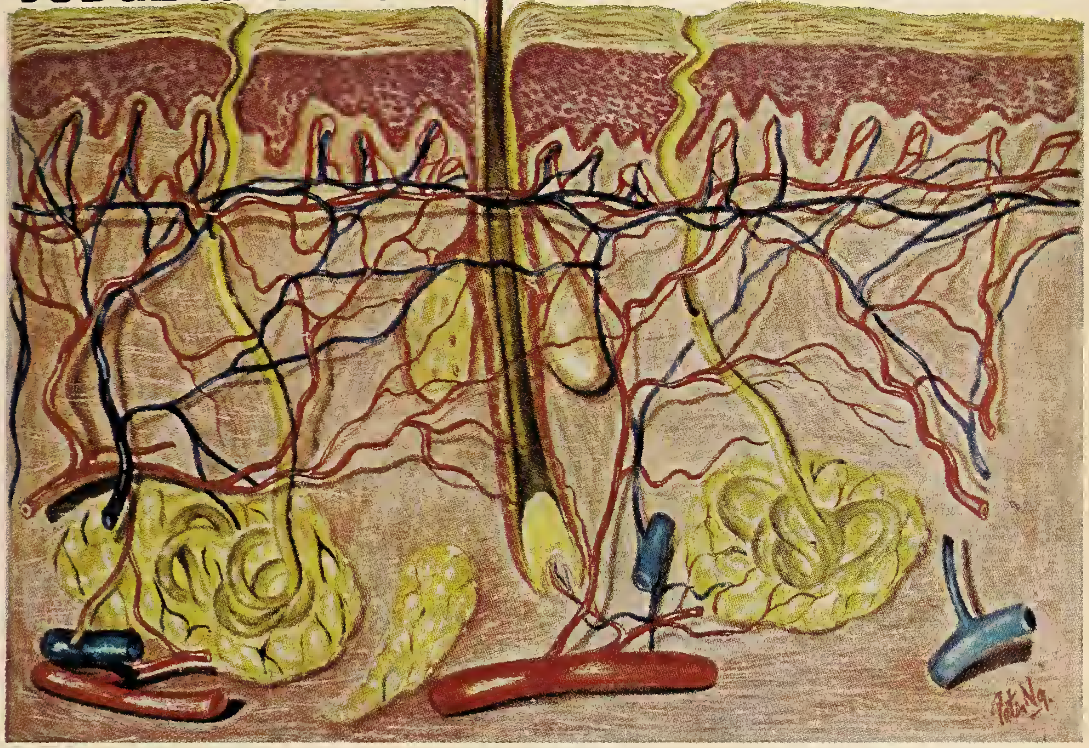
"We must be sure we reach the opinion leaders, giving them priority over the great masses, because they will determine what will really happen."

The clincher used in the PR Institute address was this observation, "Only by keeping alert and sensitive to the trends of human attitudes and the ways to mesh our purposes into them will we make possible public relations successes in the future.

MSMS President C. Allen Payne, M.D., and MSMS Public Relations Committee Chairman Brock E. Brush, M.D., led the Michigan delegation at the annual conference. Others attending from Michigan included MSMS Secretary Oliver B. McGillicuddy, M.D., Lansing; J. L. Leach, M.D., Flint; Roy J. Gerard, M.D., Saginaw, and G. E. R. Anthony, M.D., Flint. Also attending were Carl King, executive secretary, Saginaw County Medical Society; Mrs. Ruth I. Garnsey, executive secretary, Genesee County Medical Society; Wm. G. McClimans, executive secretary, Kent County Medical Society, and Mrs. Mary G. Haines, executive secretary, Oakland County Medical Society, and John A. Doherty, executive director, Michigan Health Council. Hugh W. Brenneman, MSMS executive director, who was a program participant, led the MSMS staff representatives, who included Richard M. Campau, Herbert A. Auer, and Peter Hoheisel.

By Patronizing
Our Advertisers
You Help Support
MICHIGAN MEDICINE

JUDGE ANTIBIOTIC OINTMENTS HERE



Results on skin are final proof of any topical antibiotic's effectiveness

No in vitro test can duplicate a clinical situation on living skin. 'Neosporin' (polymyxin B—bacitracin—neomycin) Antibiotic Ointment has consistently proven its effectiveness in thousands of cases of bacterial skin infection. The spectra of the three antibiotics overlap in such a way as to provide bactericidal action against most pathogenic bacteria likely to be found topically. Diffusion of the antibiotics from the special petrolatum base is rapid since they are insoluble in the petrolatum, but readily soluble in tissue fluids. The Ointment is bland and rarely sensitizes.

Caution: As with other antibiotic preparations, prolonged use may result in overgrowth of nonsusceptible organisms and/or fungi. Appropriate measures should be taken if this occurs.

Contraindications: This product is contraindicated in those individuals who have shown hypersensitivity to any of its components.

Supplied: Tubes of 1 oz., ½ oz. with applicator tip, and ⅛ oz. with ophthalmic tip.

Complete literature available on request from Professional Services Dept. PML.

'NEOSPORIN'®
brand
POLYMYXIN B-BACITRACIN-NEOMYCIN
OINTMENT

BURROUGHS WELLCOME & CO. (U.S.A.) INC., Tuckahoe, N.Y.

new

a new formulation that relieves pain in tension headache and neuralgia

Dialog is a combination of 15 mg allobarbital and 300 mg acetaminophen. Allobarbital, a proven barbiturate, provides desirable sedation in patients experiencing pain and discomfort. Acetaminophen is a nonsalicylate analgesic-antipyretic, well tolerated and useful in a wide range of mildly painful and febrile conditions.

Dialog is well tolerated, even by those sensitive to aspirin. It is nonirritating to the gastrointestinal tract and, in recommended dosage, has no adverse effects on the kidneys.

- Raises the pain threshold
- Suppresses the pain-producing mechanism
- Reduces emotional tension

2/3449 MK-3

or tension headach

Dialog™

(allobarbital and acetaminophen CIBA)

Indications: For relief of pain and discomfort of simple headache; neuralgia, myalgia, and musculoskeletal pain; dysmenorrhea; bursitis; sinusitis; fibrositis. Also indicated to reduce fever and to relieve discomfort due to respiratory infections, influenza, and other febrile conditions.

Contraindication: Not recommended during pregnancy.

Caution: May be habit-forming. Do not use in patients sensitive to barbiturates or in those with moderate to severe hepatic disease.

Side Effects: Nausea, transitory dizziness, rash. Overdosage of allobarbital produces symptoms typical of acute barbiturate excess.

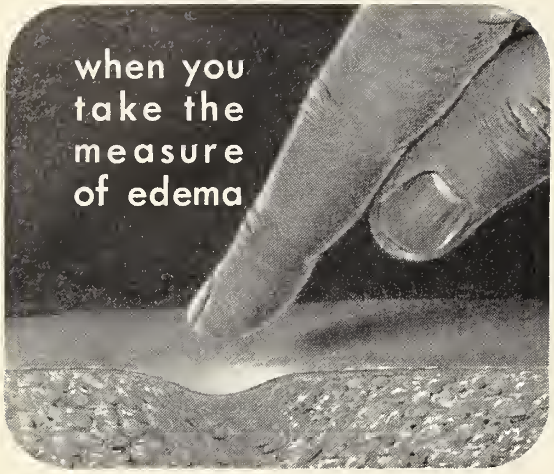
Dosage: *Adults:* 1 or 2 tablets every 4 hours. Not to exceed 8 tablets in 24 hours. *Children 6 to 12:* ½ to 1 tablet every 4 hours. Not to exceed 4 tablets in 24 hours.

Supplied: *Tablets* (white, scored), each containing 15 mg allobarbital and 300 mg acetaminophen; units of 3 bottles of 30.

For your convenience — prescription-size bottle of 30.

CIBA Pharmaceutical Company, Summit, N.J.

CIBA



. . . introduce your patient to

AQUATAG®
(BENZTHIAZIDE)

AQUATAG (Benzthiazide) is a potent, orally active, nonmercurial, diuretic agent. It is effective orally in producing diuresis in edema states, where it is therapeutically comparable to mercurials given parenterally. AQUATAG (Benzthiazide) is mildly antihypertensive in its own right and enhances the action of other antihypertensive drugs when used in combination.

DIURETIC ACTION: Clinically, the oral administration of AQUATAG (benzthiazide) results in diuretic activity within two hours with maximal natriuretic, chloruretic, and diuretic effects occurring during the fourth, fifth and sixth hours. Maintenance of response continues for approximately 12 to 18 hours. Acidosis is an unlikely complication since therapeutic doses of AQUATAG (benzthiazide) do not appreciably increase bicarbonate excretion. Edematous patients receiving 50 mg. of AQUATAG (benzthiazide) daily for five days developed a maximal increase in the rate of sodium excretion on the first day, and maintained this high rate until depletion of excessive body stores of sodium.

In congestive heart-failure patients, AQUATAG (benzthiazide) produced the same weight loss, during a 48-hour treatment period as did a maximally effective dose of hydrochlorothiazide.

DOSAGE: Diuresis, initially 50 to 200 mg.; maintenance 25 to 150 mg., daily. Hypertension 50 to 100 mg. initially, adjusted to 50 mg. t.i.d. or downward to minimal effective dosage level.

WARNINGS: Use with caution in the presence of renal disease as azotemia may be precipitated or increased. In patients with advanced hepatic disease, electrolyte imbalance may result in hepatic coma. Dosage of coadministered antihypertensive agents should be reduced by at least 50%. In cases of suspected electrolyte imbalance, serum electrolyte determinations should be performed and imbalance, if any, corrected. Stenosis or ulcer of small intestine have been reported with coated potassium formulas, and surgery has been required and deaths have occurred. Based on surveys of both United States and foreign physicians, incidence of these lesions is low and a causal relationship in man has not been definitely established. Until further experience has been obtained, the use of the drug in pregnant patients should be weighed against possible hazards to the fetus.

CONTRAINDICATIONS: AQUATAG (benzthiazide) is contraindicated in progressive renal disease or dysfunction including increasing oliguria and azotemia. Continued administration of this drug is contraindicated in patients who show no response to its diuretic or antihypertensive properties. Severe hepatic disease is a relative contraindication. (See "Warnings" above.)

PRECAUTIONS AND SIDE EFFECTS: Electrolyte imbalance with hypokalemia (digitalis toxicity may be precipitated), hypochloremic alkalosis and hyponatremia may occur.

Patients with cirrhosis should be observed for impending hepatic coma and hypokalemia. Other reactions may include blood dyscrasias, hyperuricemia and gout, nausea, jaundice, anorexia, vomiting, diarrhea, dizziness, paresthesia, photosensitivity and headache. Hepatic fetor, tremor, confusion and drowsiness are signs of impending pre coma and coma in patients with cirrhosis. Insulin requirements may be altered in diabetes. AQUATAG (benzthiazide) should be used with caution post-operatively as hypokalemia is not uncommon. Potassium supplementation may be advisable pre- and post-operatively. There have been occasional reports of thrombocytopenia, leukopenia, agranulocytosis, aplastic anemia and precipitation of acute pancreatitis or jaundice.

Before prescribing or administering, read the package insert or file card available on request.

Available as 25 or 50 mg. scored tablets.

Request clinical samples and literature on your letterhead.

S.J.TUTAG
& COMPANY
Detroit, Michigan 48234

Medical News Releases Score High in Survey

Sixty per cent of the medical school faculty members responding to a University of Wisconsin survey reported that they sometimes get information from the mass media about their own special medical interests — and an even greater percentage felt that news articles contribute to public information and understanding.

News of medical research is one method of informing the public about how money given to medical research is spent, about half of the polled teachers pointed out. Another twenty per cent said the public has a genuine interest in medical research news regardless of the money involved.

In further answer to the question as to whether it is important for the public to read medical research news, and if so, why, 17 per cent of the 144 replies said that mass media medical research news promotes better community health and increases the public's understanding of what research is about.

Fourteen per cent of the medical teachers felt that it was unimportant for the public to read about medical research owing to the readers' lack of scientific background to understand or properly analyze this type of news.

Only 21 per cent of the respondents thought that the public understands either "extremely well" or "pretty well" the work being done within their own medical specialty. Thirty-eight per cent, though, believed that the public understands either "extremely well" or "pretty well" the scientific research being done generally.

The survey was prepared and distributed by the Office of Public Information at the University of Wisconsin Medical School, Madison. Paul Van Nevel, director of public information, and Donald L. Shaw, science writer, composed the survey.

Interest in medicine as a career is growing among the nation's youth. The American Medical Association is receiving inquiries at the rate of about 35,000 a year from students interested in medicine.

Approximately 11,000 MD graduates of foreign medical schools are taking their advanced training in internship and residency programs in the United States.

EXPLAINS HOW PHYSICIANS, WIVES SHAPE OPINIONS

(The following is excerpted from a brochure for physicians published by AMPAC)

Physicians and their wives are opinion leaders in their communities. If they will simply take advantage of their leadership position, many a voter who would otherwise have stayed home on Election Day will go to the polls and cast a ballot for a candidate supported by the medical profession. The big thing is to *ask them to vote.*

Most people who are undecided about how to vote, or who simply don't take much interest in politics, make up their minds to vote for a candidate or party slate on the basis of conversations with friends, associates, or people in whose judgment they have confidence.

A recent survey showed that the less interested people relied more on political conversations than on the formal communications media as sources of information upon which they based their voting decision. Three-quarters of those who had not originally intended to vote, but were persuaded to go to the polls, admitted that the only reason they voted at all was because of somebody's personal influence.

A doctor's routine takes him into many neighborhoods, and if he talks politics wherever he goes, he will quickly be able to identify the saints, sinners, and savables that he meets. By using the same technique as a precinct worker, the physician may well increase his candidate's vote by several dozen. And his wife can do the same.

Final Day to Register To Vote Is October 10

October 10 will be the final day for eligible voters to register for the November 8 election if they are not already registered.

MSMS leaders urge every physician to be registered to exercise his right to vote in November, and also express the hope that physicians will urge members of their family, their friends and patients to remember the October 10 deadline.

★

Specialized Service
IN
PROFESSIONAL LIABILITY INSURANCE
is a high mark of distinction

THE
MEDICAL PROTECTIVE COMPANY
FORT WAYNE, INDIANA

Professional Protection Exclusively since 1899

DETROIT OFFICE: G. A. Triplett, R. K. Wind and R. H. Harp, Representatives
2405 West McNichols Road, Detroit 48221 Telephone: 313-862-8064

GRAND RAPIDS OFFICE: G. J. Haworth, Representative
422 Federal Square Building, Grand Rapids 49502 Telephone: 616-454-4477

How long will it take her to recover from her hip fracture if she just doesn't care?

Does she really care?
s she alert, encouraged,
ositive and optimistic
bout getting completely
ell soon?
Or has she given in to
he demoralizing impact
f confinement, disability
nd dependency?
When functional fatigue
omplicates convalescence,
lertonic can help...

Pleasant-tasting Alertonic is pipradrol hydrochloride—an effective cerebral stimulant whose gentle analeptic action helps counteract the apathy and inertia that can often delay convalescence—together with an excellent vitamin and mineral formula, in a satisfying 15% alcohol vehicle.

Nothing fosters confidence and a sense of well-being better than your own personal warmth, understanding and encouragement together with Alertonic to help insure prompt response.

Adequate dosage is important: Prescribe Alertonic—one tablespoonful t.i.d., 30 minutes before meals...tastes best chilled.
And for your patient's sake, prescribe Alertonic in the convenient, economical one-pint bottle.

Alertonic®

Available Only On Prescription

Each 45 cc. (3 tablespoonfuls) contains: alcohol, 15%; pipradrol hydrochloride, 2 mg.; thiamine hydrochloride (vitamin B_1) (10 MDR*), 10 mg.; riboflavin (vitamin B_2) (4 MDR), 5 mg.; pyridoxine hydrochloride (vitamin B_6), 1 mg.; niacinamide (5 MDR), 50 mg.; choline,† 100 mg.; inositol,† 100 mg.; calcium glycerophosphate, 100 mg. (supplies 2% MDR for calcium and for phosphorus) and 1 mg. each of the following: cobalt (as chloride), manganese (as sulfate), magnesium (as acetate), zinc (as acetate), and molybdenum (as ammonium molybdate).

*Multiple of adult Minimum Daily Requirement supplied.
†The need for these substances in human nutrition has not been established.

Indications: 1. Functional fatigue such as that often associated with: a depressing life experience or stressful time of life; advancing years; convalescence; limited activity or confinement. 2. Poor appetite and vitamin-mineral deficiency as they occur in: patients having faulty eating habits; geriatric patients who are losing interest in food; patients convalescing from debilitating illness or surgery.

Dosage: Adults, 1 tablespoonful; children (over 15 years old), 1 to 2 teaspoonfuls; children (4 to 15 years old), 1 teaspoonful. To be taken three times daily 30 minutes before meals.

Contraindications: As with other drugs with CNS stimulating action, Alertonic is contraindicated in hyperactive, agitated or severely anxious patients and in chorea or obsessive compulsive states.

Side effects: Reports of overstimulation have been rare. Patients who are known to be unduly sensitive to the effects of stimulant drugs should be observed carefully in the initial stages of treatment.

Merrell

THE WM. S. MERRELL COMPANY
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215

In Memoriam

Thomas G. Amos, MD, Detroit

Thomas G. Amos, MD, Detroit surgeon for 50 years, died July 30 at Saranac Lake, N.Y., where he was vacationing. He was 76.

A 1916 graduate of the Wayne State University Medical School, Doctor Amos was affiliated with Highland Park General Hospital. Doctor Amos was a fellow of the American College of Surgeons and his medical fraternity was Phi Rho Sigma.

During World War I, Doctor Amos served in the medical corps.

Doctor Amos was a Life Member of the Michigan State Medical Society.

* * *

Joseph W. Becker, MD, Detroit

Joseph W. Becker, MD, 68, longtime Detroit proctologist, died August 10 at Bon Secours Hospital, Grosse Pointe.

A native Detroiter, Doctor Becker received his degree from Wayne State University School of Medicine in 1926, where he was an instructor in proctology from 1940 to 1945. A founder and Past President of the Detroit Proctologic Society, Doctor Becker was also a Past President of the Michigan Proctologic Society and a member of the American Proctologic Society. Doctor Becker was affiliated with Harper Hospital. His medical fraternity was Phi Beta Pi.

* * *

Edwin A. Calkins, MD, Lake Orion

Edwin A. Calkins, MD, 44, died August 18, in Lake Orion where he had been practicing medicine for 10 years.

A 1956 graduate of the Loma Linda University School of Medicine, Doctor Calkins served his internship at Pontiac General Hospital. At the time of his death Doctor Calkins was associated with the Orion Medical Center. Doctor Calkins was a member of the American Academy of General Practice.

* * *

Casimir A. Domzalski, MD, Detroit

Casimir A. Domzalski, MD, 70, Detroit general practitioner since 1919, died August 19 at his summer home at Pigeon.

Doctor Domzalski began his medical practice in Detroit following his graduation from the University of Michigan School of Medicine in 1919. A former chief of staff at St. Francis Hospital, Hamtramck, Doctor Domzalski was affiliated with that hospital at the time of his death.

Doctor Domzalski was a Life Member of the Michigan State Medical Society.

Among the survivors are two sons, both physicians. Casimir A., Jr., MD, is in Santa Barbara, California, and Henry M., MD, in Detroit.

* * *

Douglas Donald, MD, Detroit

Douglas Donald, MD, past president of the Wayne County Medical Society died September 1, at age 72.

Born in Detroit, Doctor Donald was graduated from Harvard Medical School in 1918. A fellow and past governor of the American College of Physicians, Doctor Donald was also past president of the Michigan Heart Association. His medical fraternity was Phi Rho Sigma. Doctor Donald was associated with Jennings Memorial, Bon Secours, Cottage, Harper and Ford Hospitals, all of Detroit.

During World War II Doctor Donald served as a lieutenant colonel and was consultant for the 5th Army medical unit.

Doctor Donald was a life member of the Michigan State Medical Society.

* * *

Adrian R. Jones, MD, Detroit

Adrian R. Jones, MD, Detroit physician for 40 years, died August 25 at St. Joseph Mercy Hospital where he was a member of the staff. He was 70 years old.

A general practitioner, Doctor Jones received his medical degree from the Wayne State University School of Medicine in 1926. Doctor Jones was a veteran of World War I.

Doctor Jones was a life member of the Michigan State Medical Society.

* * *

Edmund D. Margrave, Sr., MD, Detroit

Edmund D. Margrave, Sr., MD, former chief of staff at Mt. Carmel Hospital, died August 10 at Henry Ford Hospital. He was 75.

Born in Portland, Oregon, Doctor Margrave was a 1924 medical school graduate of Washington University, St. Louis. Doctor Margrave was a fellow of the International College of Surgeons. At the time of his death Doctor Margrave was a staff surgeon at Mt. Carmel Mercy Hospital, a post he held for 27 years.

During World War I Doctor Margrave served as a first lieutenant in France.

Doctor Margrave was a Life Member of the Michigan State Medical Society.

* * *

John C. Montgomery, MD, Detroit

John C. Montgomery, MD, 73, Detroit pediatrician, died August 21 at his residence in Royal Oak.

A native of Champion, Doctor Montgomery was graduated from Johns Hopkins Medical School in 1918. At the time of his death Doctor Montgomery was a staff member of Harper and William Beaumont hospitals, and was affiliated with Henry Ford and the Rehabilitation Institute of Metropolitan Detroit. A Past President of the Detroit Pediatric Society and the Detroit Medical Club, Doctor Montgomery was a Life Member of the American Academy of Pediatrics and a member of the American Psycho-Somatic Society. His medical fraternities were Alpha Kappa Kappa and Alpha Omega Alpha.

Doctor Montgomery was a Life Member of the Michigan State Medical Society.

Among the survivors is a son, William C., also a physician.

* * *

Eugene M. Savignac, MD, Detroit

Eugene M. Savignac, MD, Detroit radiologist, died July 21 at Holy Cross Hospital where he was a staff member. He was 56.

A native of Massachusetts, Doctor Savignac lived in Detroit for 35 years, having been graduated from the Wayne State University School of Medicine in 1936. He was a Past President of the Detroit Radium and Roentgen Ray Society, a member of the Radiological Society of North America and the American College of Radiology.

Doctor Savignac served in the United States Naval Reserve from 1944 to 1946.

* * *

Alexander Szmigiel, MD, Detroit

Alexander Szmigiel, MD, 54, East Detroit physician, died August 14 at Bon Secours Hospital.

A native Detroiter, Doctor Szmigiel was graduated from Georgetown Medical College.

INGRAM'S SERVICE DEPARTMENT

ALL FACTORY TRAINED MEN

We service Medical Equipment, Electrocardiographs, Basal Metabalors, Sterilizers, Autoclaves, Diathermy Outfits, Cutting Units, Ultra Violet Lamps, Hydro Therapy Units, Laboratory Equipment. ALL BURDICK, LIEBEL FLARSHEIM AND RITTER EQUIPMENT.

If you have any Service problems, please call us at TE 2-4444, ask for the SERVICE DEPARTMENT and we will gladly help in any way we can.

THE G. A. INGRAM COMPANY

4444 Woodward Avenue TEmple 2-4444 Detroit, Michigan 48201

CANCER BOOKLETS OFFERED

Valuable cancer information may be obtained from the American Joint Committee on Cancer Staging and End Results Reporting.

The American Committee on Cancer Staging and End Results Reporting was organized on January 9, 1959, and is sponsored by the American College of Surgeons, The American College of Radiology, the College of American Pathologists, the American College of Physicians, the American Cancer Society, and the National Cancer Institute. Each sponsor designates members. The American College of Surgeons accepted the invitation to serve as the Administrative Sponsor.

Subcommittees, designated as Task Force Committees, are appointed by the Joint Committee to consider malignant neoplasms of appropriate anatomical sites for the purpose of developing clinical classifications for staging and end reporting. Task Forces are composed of members and consultants with special interests and skills. To date of this publication, these Task Forces now have under advisement malignant tumors of the Breast; Larynx; Bladder and Prostate; Cervix; Lung; Colon, Rectum, and Anus; Kidney and Ureter; Fundus, Adnexa, and Vagina; Pharynx (Hypopharynx, Oropharynx, and Nasopharynx); Oral Cavity; Lymphoma; Thyroid; Melanoma of Integument; Ovary; Cancer of Skin; Esophagus; and a brochure on End Results Reporting prepared by a special Task Force.

Copies of any or all of the pamphlets may be obtained from The American College of Surgeons, 55 East Erie Street, Chicago, Ill., 60611.

Noted and Quoted:

"Men influence the conduct of others chiefly through personal association and intercourse. There is such a preponderance of good in human nature that association with men ordinarily begets a liking for them. As men come to know each other, each comes to receive from the others the respect and confidence to which he is entitled; his character and opinions insensibly acquire their due weight and influence. It is not the stranger who says, 'go there,' or 'do that,' who is obeyed, but it is the old acquaintance who says, 'come with me,' or 'let us do thus and so,' who is followed."

(Elihu Root — 1906)

Medical school construction is booming. There now are 88 medical schools in the U.S. Eleven new schools have opened since the end of World War II and 13 more will be in operation by 1970.

Personalized Professional Service

Professional function and image . . . style . . . variety . . . you can enjoy all thes benefits in design-coordinated offices and examining rooms created by Noble-Blackmer. If you prefer, we will even create a color scheme, and handle the interior decoration.

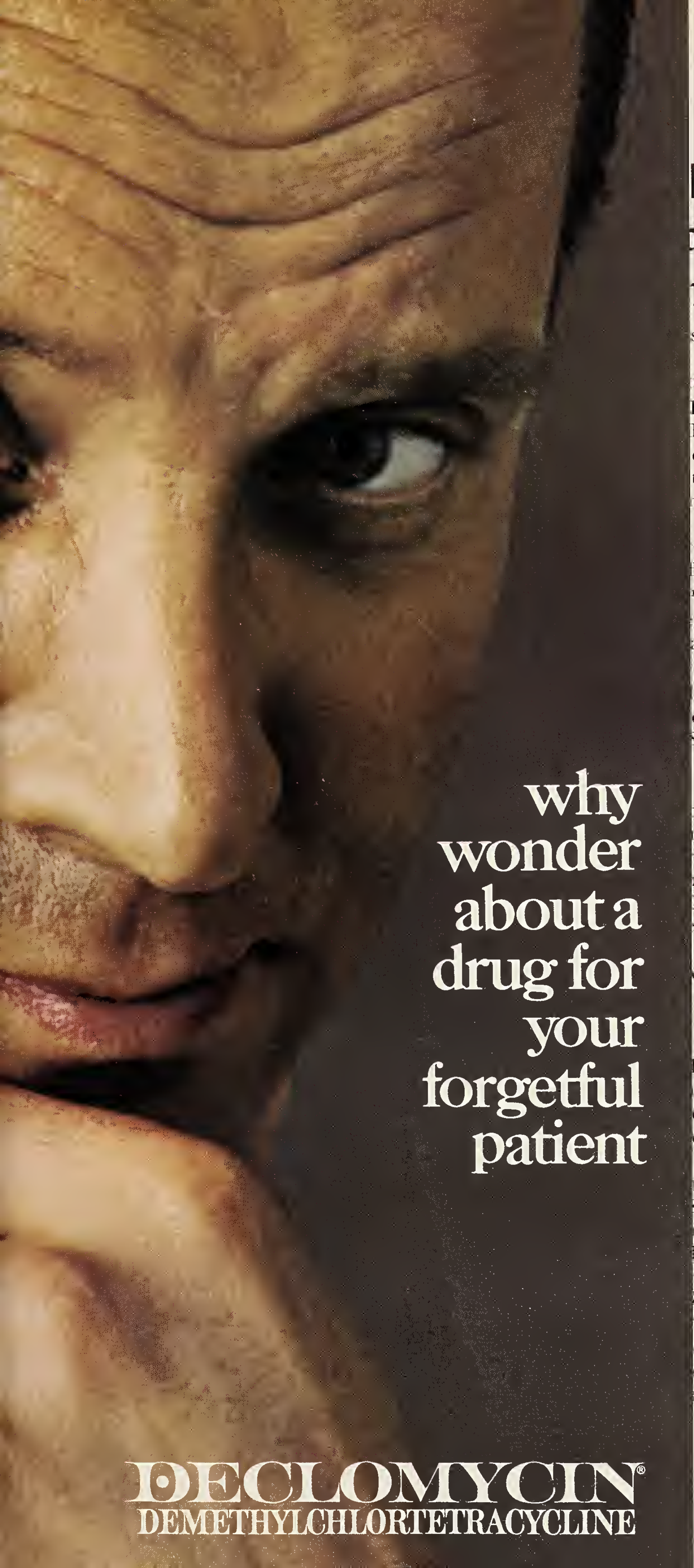
Noble-Blackmer stands ready to help you create an efficient, functional office that saves you time and energy . . . one which will create the proper professional image with your patient.

Depend on Noble-Blackmer for Supplies, Pharmaceuticals and Equipment for
- Physicians
- Hospitals
- Nursing Homes
- Laboratories

NOBLE-BLACKMER, Inc
personalized professional servic

801 S. Brown St.
Jackson, Michigan
Ph. (517) 787-3110

533 W. Whitcomb
Kalamazoo, Michig
Ph. (616) 345-51


why wonder about a drug for your forgetful patient
DECLOMYCIN®
DEMETHYLCHLORTETRACYCLINE

ll
d
for MAP

stall, M.D., Charlevoix, is the
of the Michigan Association
r 1966-67.

l, a former president of the
lical Society and an alternate
erican Medical Association, is
tate Board of Registration in
the Founding Board of MAP
the Board continuously since
tor Saltonstall has had a long
MAP.

now is Edwin H. Young, a
r from Ann Arbor, who is a
l and Metallurgical Engineer-
of Michigan.

tonstall as Treasurer is James
of Dearborn. Re-elected Secre-
Savage, A.I.A., Grand Rapids

Executive Committee of the
the officers noted above are:
ns, R.Ph., Lansing; Harry R.
; George H. Cary, LL.B., De-
edy, Ed.D., East Lansing; B.
P.A., Detroit; Harold D. Sher-
rsville.

N "OVARY" IN DETROIT

"The Ovary: Its Physiology
be presented on November
vid Whitney Building by the
ecology and Obstetrics of Har-
ayne State University School

rogram will be: Richard Blan-
eattle; David H. Carr, M.B.,
rio, Canada; Professor Carl
oseph W. Goldzieher, M.D.,
rt B. Greenblatt, M.D., Au-
upperman, M.D., New York
gis, M.D., Boston, and J. Don-
Baltimore.

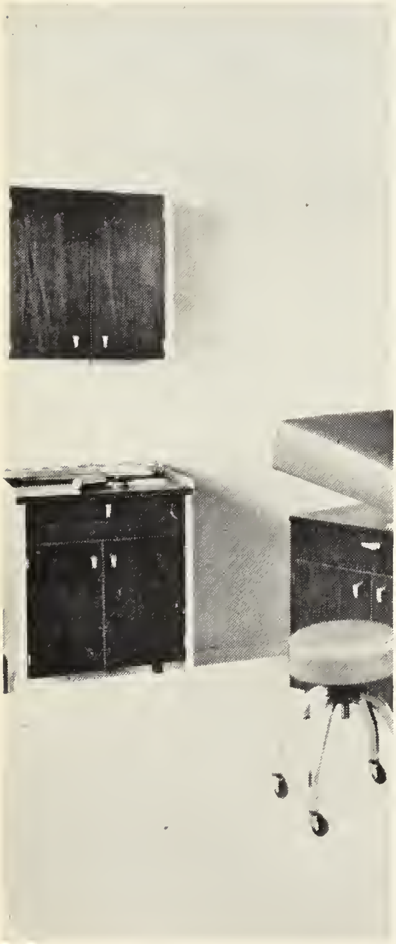
n about the symposium may
arold C. Mack, M.D., Program
Hospital, 3825 Brush Street,

CANCER BOOKLETS OFF

Valuable cancer information
from the American Joint Con
Staging and End Results Rep

The American Committee
and End Results Reporting wa
uary 9, 1959, and is sponsorec
College of Surgeons, The Ar
Radiology, the College of Am
the American College of Physic
Cancer Society, and the Nation
Each sponsor designates memb
College of Surgeons accepted
serve as the Administrative S

Subcommittees, designated a
mittees, are appointed by the
consider malignant neoplasms
tomical sites for the purpose of
classifications for staging and e
Forces are composed of memb
with special interests and skil
publication, these Task Force
advisement malignant tumors
ynx; Bladder and Prostate; Ce
Rectum, and Anus; Kidney ar
Adnexa, and Vagina; Pharyn
Oropharynx, and Nasopharyn
Lymphoma; Thyroid; Melano



-more convenient
-more easily remembered

DECLOMYCIN®
DEMETHYLCHLORTETRACYCLINE
300 mg FILM COATED TABLETS

are made for b.i.d.

Effective in a wide range of everyday infections—respiratory, urinary tract and others—in the young and aged—the acutely or chronically ill—when the offending organisms are tetracycline-sensitive.

Contraindication—History of hypersensitivity to demethylchlortetracycline.

Warning—In renal impairment, usual doses may lead to excessive systemic accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated and, if therapy is prolonged, serum level determinations may be advisable. A photodynamic reaction to natural or artificial sunlight has been observed. Small amounts of drug and short exposure may produce an exaggerated sunburn reaction which may range from erythema to severe skin manifestations. In a smaller proportion, photoallergic reactions have been reported. Patients should avoid direct exposure to sunlight and discontinue drug at the first evidence of skin discomfort.

Precautions and Side Effects—Overgrowth of nonsusceptible organisms may occur. Constant observation is essential. If new infections appear, appropriate measures should be taken. Use of demethylchlortetracycline during tooth development (last trimester of pregnancy, neonatal period and early childhood) may cause discoloration of the teeth (yellow-grey-brownish). This effect occurs mostly during long-term use but has also been observed in short treatment courses. In infants, increased intracranial pressure with bulging fontanels has been observed. All signs and symptoms have disappeared rapidly upon cessation of treatment. Side reactions include glossitis, stomatitis, proctitis, nausea, diarrhea, vaginitis and dermatitis. If adverse reaction or idiosyncrasy occurs, discontinue medication and institute appropriate therapy. Anaphylactoid reactions have been reported.

Average Adult Daily Dosage: 150 mg q.i.d. or 300 mg b.i.d. Should be given 1 hour before or 2 hours after meals, since absorption is impaired by the concomitant administration of high calcium content drugs, foods and some dairy products.

Capsules: 150 mg; *Tablets:* film coated, 300 mg, 150 mg, and 75 mg of demethylchlortetracycline HCl.

LEDERLE LABORATORIES
A Division of American Cyanamid Company, Pearl River, New York
422-6-4071

Annual TB Conference At MSU, Oct. 19-20

Several MSMS members will be program participants, October 19-20, for the 59th annual meeting of the Michigan Tuberculosis and Respiratory Disease Association, in conjunction with the Michigan Thoracic Society and Michigan Conference of Tuberculosis Association Workers, at Kellogg Center, East Lansing.

Participants in the program include John L. Isbister, M.D., Chief, Bureau of Community Health, Michigan Department of Public Health, who will serve as a reactor panelist for one of the session's "buzz" groups. Winthrop N. Davey, M.D., Director, TB Unit, University of Michigan Medical Center, Ann Arbor, will also serve as a reactor panelist. Robert A. Green, M.D., VA Hospital, Ann Arbor, will moderate the morning session.

Conrad R. Lam, M.D., at left, surgeon in charge, Thoracic Surgery, Henry Ford Hospital, confers with four Mexican physicians who came to hear him talk in Spanish to residents in Detroit's Latin-American community. Dr. Lam learned Spanish as a hobby 25 years ago and has lectured widely in South and Central America. The title of his talk, co-sponsored by the Michigan Heart Association and a Latin American community organization in St. Anne's Church, was, "Enfermedades y la Cirugia del Corazon" (Illnesses and Surgery of the Heart). The four brothers, all recent graduates of the University of Mexico Medical School, in Mexico City, are from left, Drs. Homero and Hugo Casab; 26-year-old twins, Salim, 25, and Zeia, 30, all of Detroit. They said they plan to take the Michigan examination this fall and then work as residents in Michigan hospitals until they master a specialty and the English language, when they will return to Mexico City to practice.

Saltonstall Advanced To Veep for MAP

Gilbert B. Saltonstall, M.D., Charlevoix, is the new Vice President of the Michigan Association of the Professions for 1966-67.

Doctor Saltonstall, a former president of the Michigan State Medical Society and an alternate delegate to the American Medical Association, is a member of the State Board of Registration in Medicine. He was on the Founding Board of MAP and has served on the Board continuously since that time. Too, Doctor Saltonstall has had a long term as Treasurer of MAP.

President of MAP now is Edwin H. Young, a professional engineer from Ann Arbor, who is a professor of Chemical and Metallurgical Engineering at the University of Michigan.

Replacing Dr. Saltonstall as Treasurer is James D. Happle, D.D.S., of Dearborn. Re-elected Secretary is George B. Savage, A.I.A., Grand Rapids architect.

Members of the Executive Committee of the Board in addition to the officers noted above are: Douglas M. Ammons, R.Ph., Lansing; Harry R. Ball, P.E., St. Joseph; George H. Cary, LL.B., Detroit; E. Dale Kennedy, Ed.D., East Lansing; B. Kenneth Sanden, C.P.A., Detroit; Harold D. Sheridan, D.V.M., Coopersville.

SYMPOSIUM ON "OVARY" SET NOV. 9-10 IN DETROIT

A symposium on "The Ovary: Its Physiology and Pathology" will be presented on November 9 and 10 at the David Whitney Building by the Departments of Gynecology and Obstetrics of Harper Hospital and Wayne State University School of Medicine.

Speakers for the program will be: Richard Blandau, Ph.D., M.D., Seattle; David H. Carr, M.B., Ch.B., Ph.D., Ontario, Canada; Professor Carl Gemzell, Sweden; Joseph W. Goldzieher, M.D., San Antonio; Robert B. Greenblatt, M.D., Augusta; Herbert S. Kupperman, M.D., New York City; Somers H. Sturgis, M.D., Boston, and J. Donald Woodruff, M.D., Baltimore.

Further information about the symposium may be obtained from Harold C. Mack, M.D., Program Chairman, Harper Hospital, 3825 Brush Street, Detroit, 48201.

104 of 125 Accepted At WSU from Michigan

The 125 first year students in this year's entering class at the Wayne State University School of Medicine were selected from nearly 1,000 applicants, a 10 per cent increase over the previous year. All but 21 students are residents of Michigan. The class includes 10 women.

Thirty-four members come to the School of Medicine from undergraduate colleges of Wayne State University. Students from other Michigan schools: Albion College — 1, Calvin College — 1, Hillsdale College — 1, Houghton College — 1, Michigan State University — 16, University of Detroit — 7, University of Michigan — 30, Western Michigan University — 2.

Other students come from such diverse places as Notre Dame, Harvard, University of Indiana, Boston University, Brandeis, Columbia, Hobart, Georgetown, Massachusetts Institute of Technology, Temple, University of Illinois, University of Pennsylvania and the University of California.

Fifteen members of the incoming class are entering the School of Medicine under the 2-4-2 Program. The 2-4-2 student spends the first two years at any accredited college of liberal arts in study directed at completion of both liberal arts and premedical requirements. The next four years, divided between the Wayne State University College of Liberal Arts and the School of Medicine, are devoted to an integrated program of study leading to the bachelor's degree and completion of basic medical sciences. The last two years are spent in clinical training at School of Medicine affiliated hospitals.

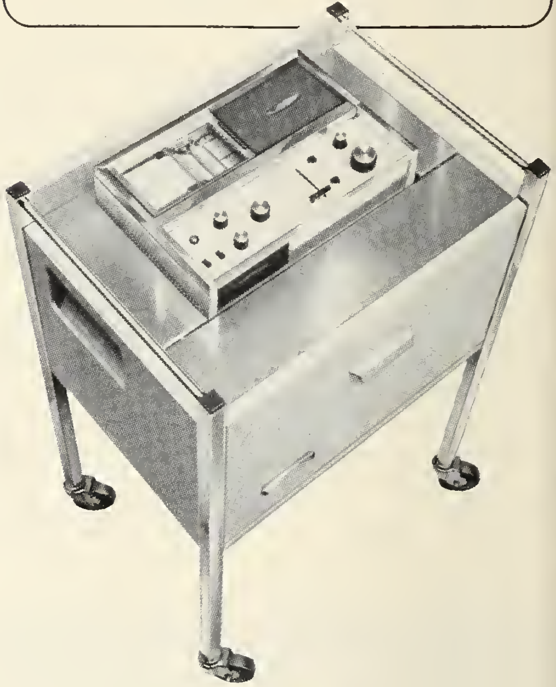
M.D. Placement Service
Michigan Health Council

Looking for a smaller town that needs and wants a physician? Do you need an associate or assistant in your practice? Are there towns in your area in need of additional physicians? If your answer is YES to any of the above questions, contact:

*M.D. PLACEMENT SERVICE
MICHIGAN HEALTH COUNCIL
P.O. BOX 431
East Lansing, Michigan 48824

* No fee for this service.

The dramatically new
Burdick EK 4
Electrocardiograph



What is a new ECG?

Take a look at the Burdick EK 4! Many important improvements have been made in electrocardiographs in recent years — this is why we invite your closer inspection of the EK 4. Reliability, diagnostic accuracy, and freshness of design are apparent in every detail. Precise recordings of high fidelity ● Designed for use with auxiliary equipment, phone transmission, permanent recording of monitoring phenomena ● Fast switching from lead to lead ● 25-50 mm. speeds ● ½ x 1 x 2 standardization on all leads ● High frequency response permits use with PC-100 Heart Sound Preamp ● Stable ● Lightweight. If your present ECG can't offer you these up-to-date features, take a closer look at the EK 4. The EK 4 is a sound investment for your practice or department, and it's backed by Burdick dealer service. Write us. The Burdick Corporation, Milton, Wisconsin 53563.

THE G. A. INGRAM COMPANY

4444 Woodward Avenue, Detroit, Michigan 4820

Telephone: TEmple 2-4444

Winthrop announces new WinGel®

ANTACID TABLETS AND LIQUID

For peptic ulcer, gastric hyperacidity, gastritis

Each WinGel tablet or teaspoon (5 ml.) contains 410 mg. of combined, highly reactive, short polymer, aluminum and magnesium hydroxides **stabilized with hexitol.**

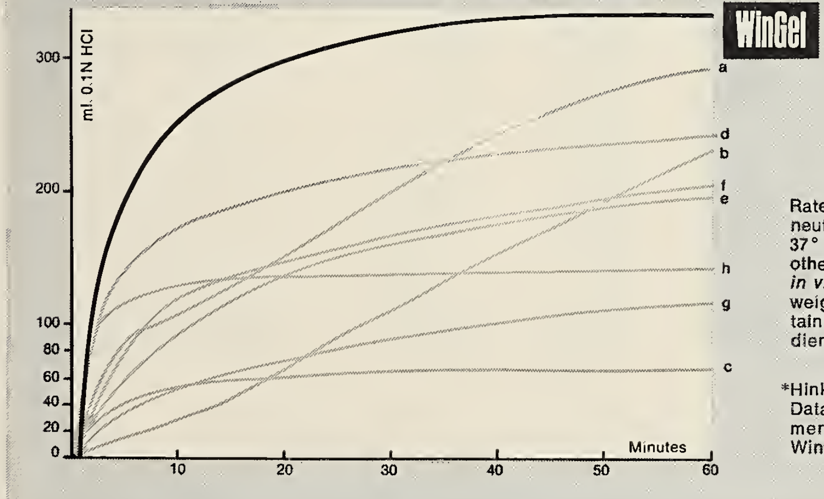
Neutralizes 300 times its active-ingredient weight in gastric acid for fast, long-lasting relief

Gastric or duodenal ulcer, acute or chronic gastritis, gastric hyperacidity...wherever there is "acid overflow" new WinGel can provide faster, longer, more complete neutralization.

In recent laboratory comparisons* with eight other leading antacids, new WinGel tablets not only neutralized more hydrochloric acid per active-ingredient weight, but neutralized it faster and longer than all other antacids tested.

Pleasant pink in color, WinGel is delicately mint flavored with a smooth-as-cream texture—qualities sure to please the patient on long-term therapy. New WinGel is also specially formulated to avoid constipation or diarrhea.

New WinGel neutralizes 300 times its active-ingredient weight in 0.1N hydrochloric acid—neutralizes more acid faster than other leading antacids



Rate of 0.1N hydrochloric acid neutralization at pH 3.5 and 37° with WinGel and eight other leading antacid tablets—*in vitro.* Samples equaled the weight of tablet material containing 1.0 Gm. active ingredients.*

*Hinkel, E. T., Jr. (New York): Data in the files of the Department of Medical Research, Winthrop Laboratories.

Dosage: Peptic ulcer or gastritis—from 2 to 4 teaspoons of WinGel liquid or 2 to 4 tablets chewed or allowed to dissolve in the mouth every two to four hours. **Gastric hyperacidity**—2 tablets or teaspoons about ½ to one hour after meals as needed; children from 7 to 14 years of age, 1 or 2 tablets or 1 or 2 teaspoons of liquid as needed.

How Supplied: Liquid in bottles of 8 fl. oz. and 1 pint. **Tablets** in cellophane strips, boxes of 50 and 100. (One teaspoon of WinGel liquid is equivalent to one WinGel tablet in acid-combining capacity.) WinGel, trademark reg. U.S. Pat. Off.

Winthrop Laboratories, New York, N.Y. 10016 Winthrop

Finally — a taste your patients will truly like

(1058M)

Two Physicians In Races Nov. 8

The names of two MSMS members will appear on the ballot Nov. 8 — both physicians running for important positions in education.

The Democratic state convention nominated Leon Fill, M.D., Detroit, to run for re-election to the State Board of Education.

The Republican state convention nominated Alfred Sokolowski, M.D., Detroit, as one of their candidates for the Wayne State University Board of Governors.

MSU to Train Managers For Health Facilities

A newly-developed Health Facilities Management Program gets underway this fall at Michigan State University after three years of planning. The program officially opened last year as a major within the School of Hotel, Restaurant, and Institute Management.

Twenty students have enrolled in the program which is being initially financed by the W. K Kellogg Foundation, which has provided a $99,480 grant to begin the three-year program. After proving its success, an attempt will be made to integrate the program fiscally with the University.

One of the aims is to provide the opportunity for a variety of experiences under actual working conditions by requiring each student to complete six months of experience in a University-approved hospital, nursing home, or health-related agency.

There have been no decisions as yet regarding specific hospitals, etc., for the six-month externship, Walter M. Burnett, associate professor of business and lecturer in the College of Human Medicine, announced. However, "the success of the Health Facilities Management Program is being greatly augmented by the Medical School and medical facilities on the MSU campus," he said.

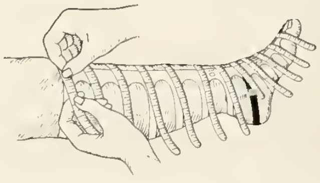
MANY AID HOSPITAL

During the past year individuals, clubs and foundations throughout Michigan have donated at least $1,038,245 and thousands of miscellaneous items to provide services for patients at the University of Michigan Hospital. There were 462 separate gifts.

© 1966, Jobst

no two legs are alike

That's why "off-the-shelf" support garments cannot be expected to successfully apply correct counter pressures to the hydro-static column of the limb. Correct counter pressures can only be supplied by a true Venous Pressure Gradient Support which has been custom made and individually engineered. Your Jobst Service Center is staffed by experts who will precisely measure and fit your patient according to your prescription. For prescription blanks and clinical data, phone or write: Jobst Service Center, Suite 426 Fisher Building, 3001 W. Grand Blvd. Phone: 875-3808 Detroit, Michigan 48202.



Only JOBST Supports are custom made from precise measurements of the individual extremity.

Book Review

adiographic Atlas of the Genitourinary System. By
harles Ney and Richard Friedenberg (and con-
ributing authors). 741 p.p., illustrated. $35.00 J.
. Lippincott Company, Philadelphia and Tor-
nto, 1966.

Ney, Friedenberg, and their well-qualified con-
ributors have done an outstanding job in com-
iling radiographic data encompassing the spectra
f urological diseases. This large and attractive
ook is well bound, the paper is of high quality
nd the reproductions of the radiographs are ex-
eptional in almost all cases. The atlas is well in-
exed and the bibliographies of each chapter are
uite thorough for the subjects treated. The leg-
nds are brief but adequate.

It would be most valuable for the complete
diology library, but also of aid for the physician
ho handles a great deal of urological problems in
is general practice. It is a good adjunct to the
racticing urologist outside the academic setting.
his must be considered one of the best books in
is field.

— G. K. Emmert, M.D.

ncyclopedia for Medical Assistants. Edited by Louis
rachman. 448 p.p., illustrated. $14.95. Cathedral
quare Publishing Company, Wisconsin, 1965.

LM ON DEPRESSION AVAILABLE

A 22-minute, color, 16 mm. film, "The Measure-
ent of Depression," depicting the development,
lidation, and use of a scale for the quantitative
easurement of depression, is offered by Lakeside
aboratories, Inc.

The scale was designed by William W. K. Zung,
.D., Durham, N.C., psychiatrist. Although initial-
devised for use in psychiatric research, it readily
nds itself to the general practice of medicine
here most depressions are first encountered. The
lm is designed for medical educational purposes
meetings of hospital staffs, county societies or
ecialty groups. The self-rating scales, available
quantity for use in office practice, come com-
ete with full instructions. Both the film and pads
the self-rating scale are available free upon re-
uest from Lakeside Laboratories, Inc., Milwaukee,
isconsin, 53201.

CASS SOCIETY HELPS COLLEGE

The Cass County Medical Society has given $1,000 to the newly-formed Southwestern Michigan College at Dowagiac for the purchase of scientific equipment. The money will be used to buy a human skeleton, a human torso, and other scientific equipment, according to Aaron F. Warren, M.D., Cassopolis, who made the award to Nathan A. Ivey, president of the new college.

The funds came from money contributed during the Sabin Polio clinics held several years ago, Doctor Warren stated. There was no charge for the oral vaccine, he said, so in appreciation many persons donated money.

The two-year junior college which opens this September will have an anticipated enrollment of approximately 300 students. In addition to the regular undergraduate program will be a special course offered for training Licensed Practical Nurses. Also available will be two-year undergraduate courses for pre-medicine and pre-medical technology.

Praises Quality of Hospitals

American hospitals are not nearly as sick as they have been pictured recently by national magazine titles such as "Our Hospitals are Killing Us" and "Our Sick Hospitals," says Lawrence A. Hill, director of the Bureau of Hospital Administration in the University of Michigan's Graduate School of Business Administration.

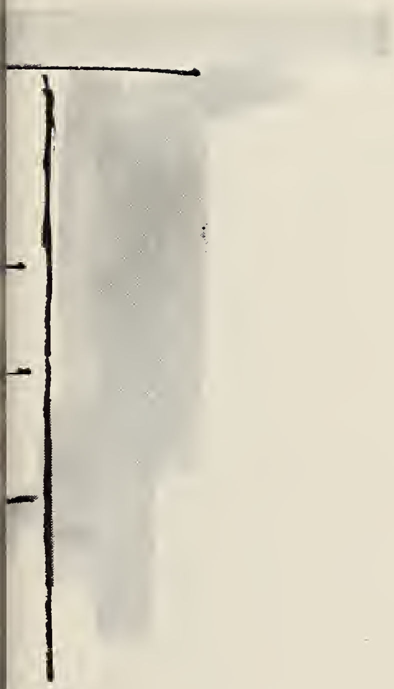
"Of course there is room for improvement in hospitals, just as in everything else," Mr. Hill says. "But by and large our hospitals are doing a better job now than ever before."

Mr. Hill adds:

"The critics insist that every citizen should have equal access to the most modern medical techniques and facilities—and as a social goal that's excellent. But I think every citizen should also have access to trunk-line air service, to the finest cultural activities, to highly skilled police and fire departments.

"Why single out medicine? We can't have an open-heart surgery team in every hospital any more than we can have a classical Greek theatre in every town. There just aren't enough professionals."

One of the real problems, Mr. Hill agrees, is the tendency of doctors to cluster in cities. "The long-run answer — not an easy one — is to build more medical schools and produce more doctors. Some of them will have to go to rural areas to make a living and build a practice."



Wait, Annabelle. Mommy hasn't told the doctor yet that you *need* a shot.

e she does, maybe she n't. But if her problem is congestion due to cold lergy, consider the medi- that combines conve- e and effectiveness— histine Melet.

let is especially suitable treatment of children. It's asant tasting, chewable t that leaves no aftertaste itty, undissolved particles in the mouth. It provides decongestant action almost as quickly as a liquid, but assures the accurate dosage of a tablet.

Because Melets are so convenient to carry and so easy to take at any time, adults, too, will appreciate this modern dosage form.

Use cautiously in individuals with severe hypertension, diabetes mellitus, hyperthyroidism or urinary retention. Caution adults who operate machinery or motor vehicles that drowsiness may occur. Each Melet contains phenylephrine hydrochloride 10 mg. and chlorpheniramine maleate 2 mg.

NOVAHISTINE®
MELET

DOW **PITMAN-MOORE** Division of The Dow Chemical Company, Indianapolis

BEGIN NEW SERIES

To provide short, pertinent details to MSMS members about Federal/State medical programs, the MSMS Committee on Governmental Medical Care Programs offers information about PRESCAD, Project Head Start and AFDC. Necessarily, only a generalization of these programs can be printed. Answers to questions pertaining to these programs can be secured by contacting MSMS.

This issue of MICHIGAN MEDICINE contains the important rules and regulations that are now being implemented by the Michigan Department of Social Services on Title XIX (Medicaid).

PROJECT HEAD START

Purposes

Designed to provide more adequate and more acceptable medical services to preschool children of low-income families in conjunction with the other activities of each child development center. This program will include a medical evaluation of each child, followed by remedial care to correct conditions that could interfere with the child's academic and social development. Coordination of the efforts of physicians, nurses, teachers and social workers will contribute to health care under this program and will also aid in organizing and implementing a family health education program.

Health Services Program

Principal services:

1. Medical evaluation of each child enrolled in the center, including medical history, developmental assessment, and physical examination.
2. Screening tests
    a. Vision
    b. Hearing
    c. Speech
    d. Tuberculin testing
3. Laboratory tests
    a. Urine testing for albumin and sugar
    b. Blood testing for anemia
4. Dental assessment
5. Completion of immunizations
6. Psychological evaluation
7. Discussion with parents
8. Teacher observation
9. Appropriate follow-up services

Procedures and Facilities

Accurate record-keeping is essential to continuity of medical care. Child development centers may use medical forms employed by their states or localities for well child clinics on preschool exams. These forms will be furnished by state and local health officers. Staff of these centers will include:

Physician as medical director for supervision, advice, consultation and policy-making;

Other staff will consist of nurses, consultants and volunteers.

Children will be eligible who live within a neighborhood which the local community has found to have a substantial degree of poverty. It must also meet the criteria of economic deprivation.

PRESCAD

Plan for Comprehensive Health Services for Preschool, School And Adolescent Children

This plan is in accordance with Section 532, Title V, Part 4, PL 89-97, hereinafter referred to as Project PRESCAD.

Objectives and Goals

Strengthening, initiation and operation of a comprehensive and coordinated health services program for children, through promotion of optimal health as well as medical care, including case finding, preventive health services, diagnosis and treatment, correction of defects and aftercare relative to their physical, emotional and social well-being with emphasis on children from low-income families or for those children who are not receiving adequate care or preventive services. This program is designed to reduce preventable illness and disability among children and to ameliorate chronic conditions amenable to treatment so that they can gain a state of total health and overcome deterrants in these goals.

Implementation Schedule

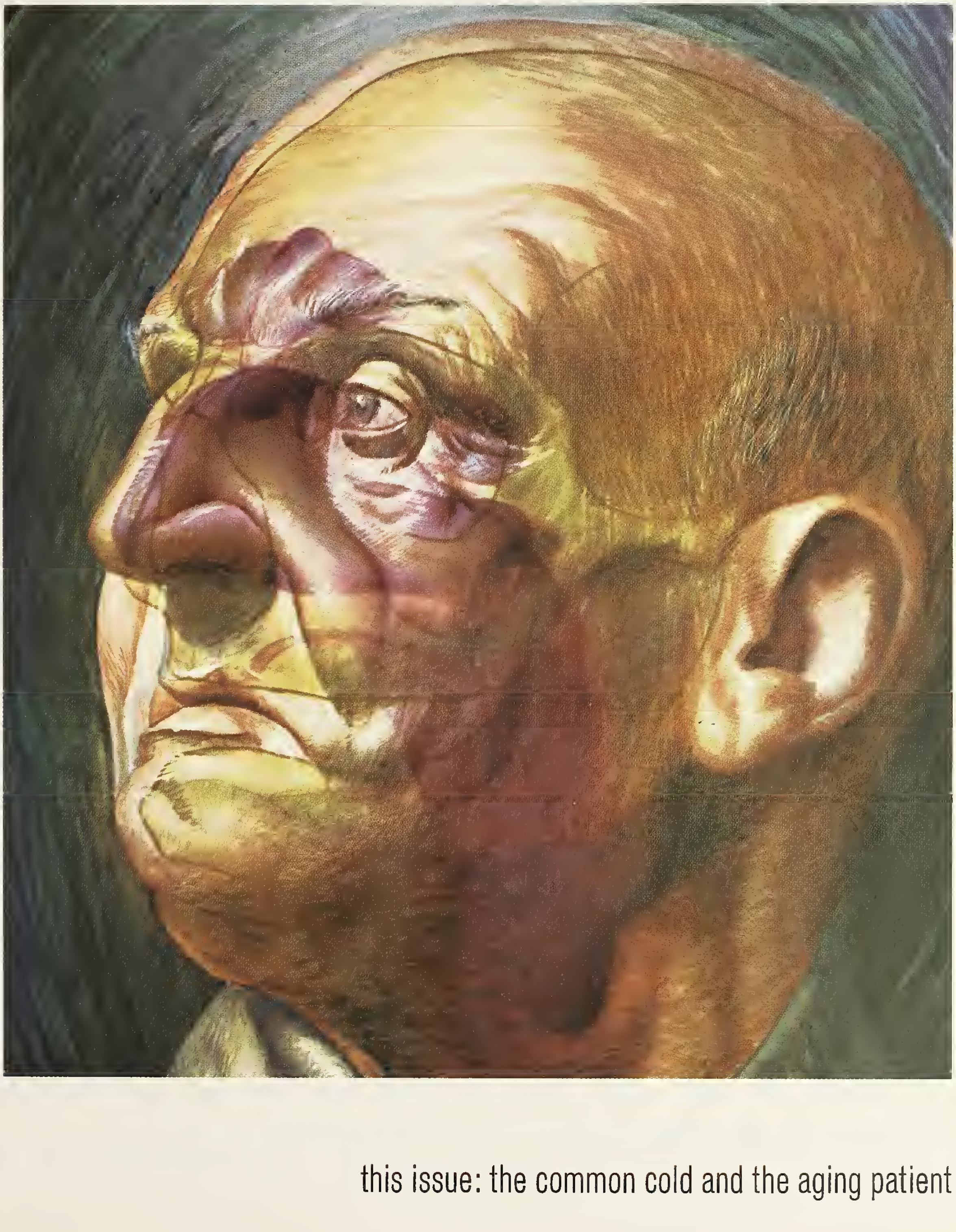
Begins March 1, 1966, with implementation date of July 1, 1966. Recruitment of key staff, organization and development programs, initiation and

(Continued on Page 906)

fall 1966

DORSEY Season

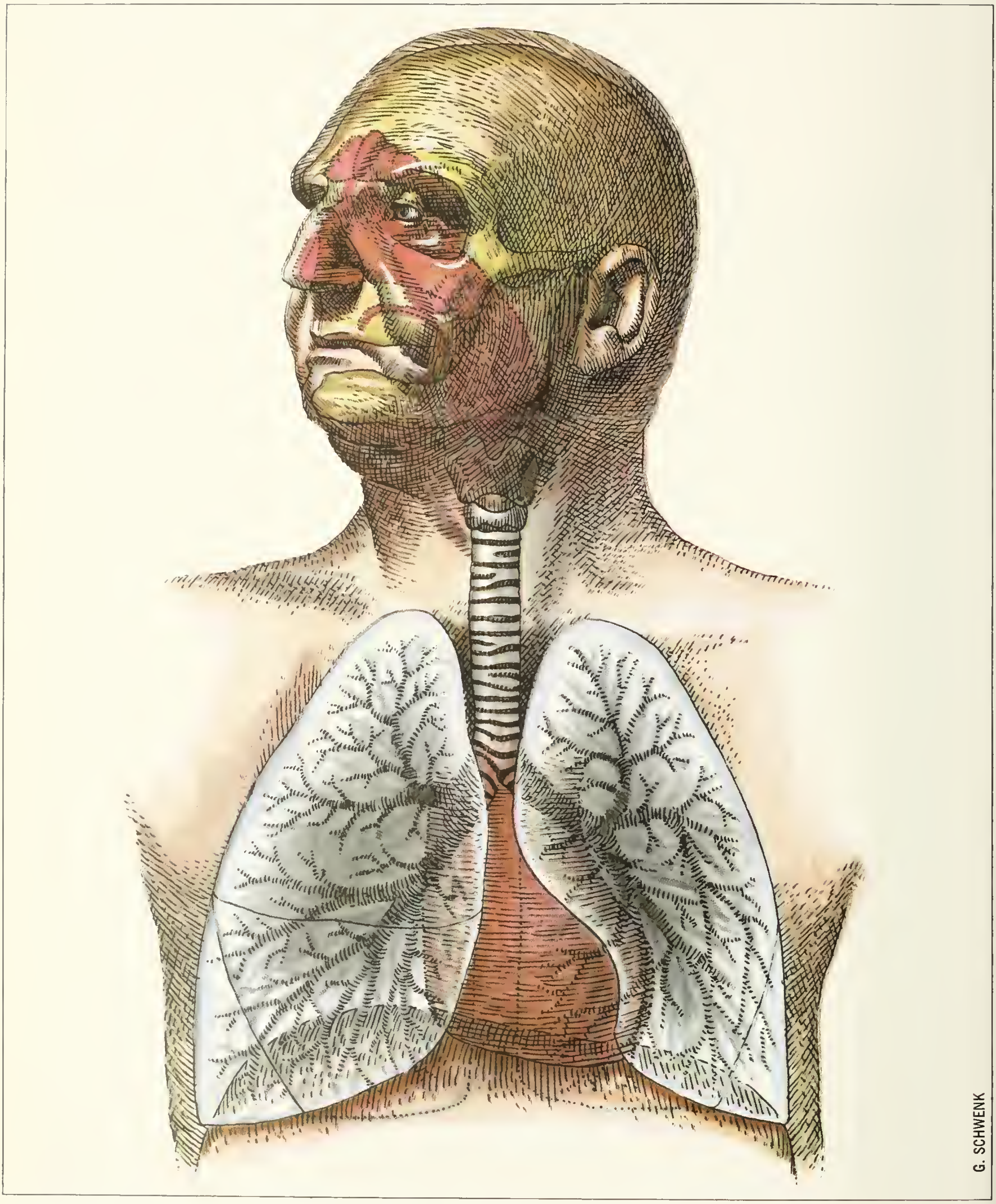
A journal within a journal published quarterly in the interests of better medicine by Dorsey Laboratories, a division of The Wander Company, Lincoln, Nebraska. Address communications to Raymond C. Pogge, M.D., Director of Medicine.



this issue: the common cold and the aging patient

the common cold and the aging patient

Louis J. Vorhaus, II, M.D., F.A.C.P.



Effects of aging on the anatomic and physiologic aspects of the respiratory apparatus.

The chest becomes more fixed, less mobile and less elastic as the bronchial walls and thoracic ligaments lose elasticity. The diaphragm and intercostal muscles atrophy and weaken. The lungs become smaller, flabbier and weigh less, decreasing vital and total lung capacity, increasing residual volume and the alveolar dead space.

Sir William Osler described pneumonia as the welcome friend of the aged patient, because the patient with pneumonia usually died quietly. But today, the well-informed physician is an even better friend of the aging patient, since it is better to live than to die, no matter how quietly.

One of the first avenues of approach in the control of the hazards of respiratory disease in the aging patient is prompt and proper attention to the common cold or upper respiratory infection. The common cold may be the first step in the relatively short path to lower respiratory infection, broncho-pneumonia and death. This train of events occurs frequently among older persons. Indeed, pneumonia is one of the most common causes of their admission to hospitals and ranks high on the list of geriatric killers. Colds are more debilitating in elderly people and the aged are more likely candidates for secondary infections such as sinusitis and bronchitis. These infections, in turn, are more prone to lead to broncho-pneumonia, because of lowered resistance and anatomic and physiologic changes in the lungs of the elderly.

What is different about the respiratory tree of an aged person and that of an otherwise healthy younger adult? Aging certainly takes its toll on all parts of the body, affecting both anatomic and physiologic aspects of the respiratory apparatus. These changes are in part due to the wear and tear that occurs over the years; the repeated bouts of respiratory infection, long exposure to atmospheric pollutants, to occupational inhalants, smoking, malnutrition, obesity, inactivity and the development of other diseases which may affect the lungs.

With the passage of years, the lungs change. They become scarred and emphysematous and lose their compliance. The whole chest becomes more fixed, less mobile and less elastic.

The anatomic changes that occur in aging render the lungs less efficient. Tests of pulmonary function in senescence show a deterioration characterized by a decrease in vital capacity and total lung capacity, an increase in residual volume and alveolar dead space. Maximum breathing capacity is reduced and uniformity of ventilation deteriorates. These problems are often aggravated by the obstructed breathing, fever and secondary infection associated with the common cold, placing an additional stress on the entire cardiopulmonary reserve.

In addition, the efficiency of a cough is below par in older persons even though they are in good health. This is partly due to the decreased respiratory excursions and distensibility of the chest wall, and partly from loss of elasticity of bronchial walls which tend to make them collapse in a cough.

The elderly patient's resistance to infection is often reduced. Nutritional deficiencies are more common in aged people. There is some evidence to indicate that their capacity to respond to stress is less efficient. Finally, there is often relatively meager symptomatic response to acute disease. The absence of obvious or dramatic clinical signs and symptoms of severe illness is particularly dangerous because, coming as it

(concluded on following page)

it's a
comforting thing
to know

For postnasal drip, clogged ears
and stuffed and runny noses

Triaminic® timed-release tablets

keeps patients comfortable 'round the clock. 24-hour decongestion on just a single tablet dosed morning, mid-afternoon and at bedtime. Patients regain senses and can breathe, smell and taste again.

Triaminic. Isn't that a comforting thing to know?

Each timed-release tablet contains:

Phenylpropanolamine hydrochloride	50 mg.
Pheniramine maleate	25 mg.
Pyrilamine maleate	25 mg.

Side effects: Occasional drowsiness, blurred vision, cardiac palpitations, flushing, dizziness, nervousness or gastrointestinal upsets. Precautions: The patient should be advised not to drive a car or operate dangerous machinery if drowsiness occurs. Use with caution in patients with hypertension, heart disease, diabetes or thyrotoxicosis.

(Advertisement)

does in a person whose defenses are weakened both locally and systemically, pulmonary disease may progress rapidly to irreversible stages before medical attention is sought. Respiratory infection is especially hazardous because the aged patient responds badly to hypoxia. Not only is his response to oxygen lack impaired, but the work of breathing, due to decreased compliance of the lung and increased stiffness of the thorax, is markedly augmented.

Many patients late in life are in a precarious and delicate cardiopulmonary balance which is easily decompensated from relatively minor insults such as colds and upper respiratory infections.

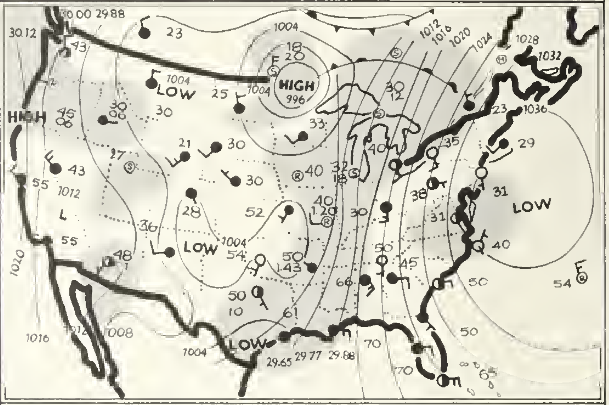
For all of these reasons, geriatricians long have stressed the importance of preventing respiratory insults. Today we have better ways of treating respiratory infection, improved techniques for clearing the lungs and bronchial tubes of secretions and better understanding of ways of improving ventilation. We possess a broader spectrum of antimicrobial agents including newer ones to deal with previously resistant organisms. Even so, the death rate from pneumonia is high in older people, and it is preferable to avoid the disease than to treat it. To do so, attention must be paid to the general maintenance of good health and all that implies, as well as to the prevention, elimination and treatment of associated conditions that predispose to or cause pneumonia such as chronic upper or lower respiratory infection, respiratory allergy, chronic sinusitis and exposure to inspired irritants.

Colds and other minor respiratory infections, which favor the development of broncho-pneumonia, should be treated vigorously and promptly, particularly those patients whose aging process has been accompanied by the development of chronic pulmonary disease. Upper respiratory passages should be cleared with decongestants. Sinuses should be drained adequately. And, when indicated, appropriate antimicrobial therapy should be instituted before serious infection of the lower respiratory tree supervenes.

In decades past it was understandable that physicians welcomed pneumonia for the aged patients because it offered them a quiet and peaceful demise. Today we recognize that in many cases, peaceful as it may have been, such deaths were often avoidable. With the current knowledge and understanding of the problems that respiratory infections impose on aging people, vigilant medical attention can often restore them to a vigorous, rewarding and productive life so that the many opportunities that exist today for people to enjoy their golden years are realized and not stolen by untimely death.

References 1. Steiglitz, Edward J., Geriatric Medicine, Medical Care of Later Maturity, 3rd edition, J. B. Lippincott Co., Philadelphia, 1954. 2. Norman, J. R., Schweppe, I. H., Salazar, E. and Knowles, J. H., Lung Volumes and Aging, Journal of the American Geriatrics Society, 12, pp. 38-47, January 1964. 3. Penman, Robert W. B., Hypoxia and Respiratory Failure, Geriatrics, 18, 807-814, November 1963. 4. Middleton, William S., Some Medical Dissections on Aging, Geriatrics, 18, 168-73, March 1963. 5. Cole, M. B. and Roberts, F. E., Clinico-Pathologic Study of Emphysema, Journal American Geriatrics Society, 12: 415-419, May 1964. 6. Horton, Glenn, Testing of Pulmonary Function, Geriatrics, 17:73-81, February 1962. 7. Banyai, Andrew L., Cough and its Management in Elderly Patients, Geriatrics, 14:621-630, October 1959. 8. Howell, T. H. and Piggot, A. P., Morbid Anatomy of Old Age, Geriatrics, 8:267-72, March 1953.

Weather Forecast Throughout the Nation



RAIN TURNING TO SNOW, INCREASING WINDS AND DROPPING TEMPERATURES FOLLOWED BY COUGH, CONGESTION AND PAIN

Tussagesic® provides up to 24-hour coverage of the tough cold with a single timed-release tablet dosed morning, midafternoon and at bedtime. Coughs are broken up, runny and stuffed noses are cleared and pain is relieved.

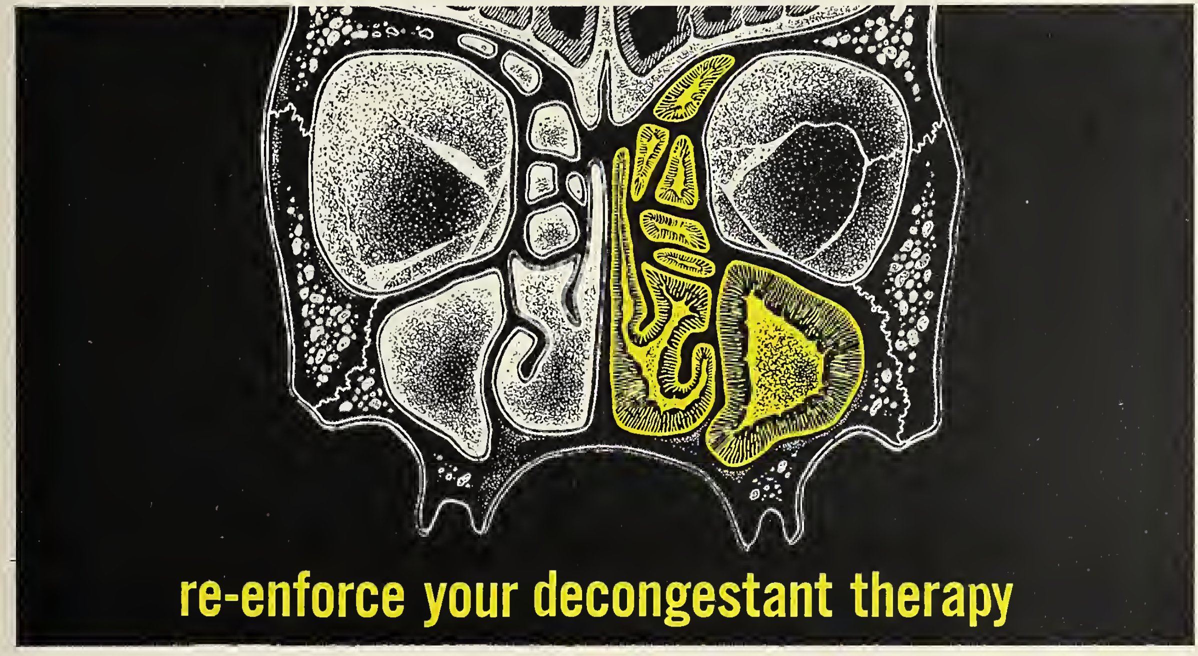
Each Tussagesic® timed-release tablet contains:

Triaminic®	50 mg.
(phenylpropanolamine hydrochloride 25 mg.; pheniramine maleate 12.5 mg.; pyrilamine maleate 12.5 mg.)	
Dextromethorphan hydrobromide	30 mg.
Terpin hydrate	180 mg.
Acetaminophen	325 mg.

Side effects: Occasional drowsiness, blurred vision, cardiac palpitations, flushing, dizziness, nervousness or gastrointestinal upsets. Precautions: Patient should not drive a car or operate dangerous machinery if drowsiness occurs. Except under professional care, do not give to patients under 12 yrs. or those who have persistent cough, high fever, heart or thyroid disease, hypertension or diabetes or use for more than 10 days.

(Advertisement)

when congestion is complicated by sulfa-susceptible bacterial invaders in the upper respiratory tract...



re-enforce your decongestant therapy

prescribe economical Trisulfaminic®

Each tablet contains: Triaminic® 25 mg. (phenylpropanolamine hydrochloride 12.5 mg., pheniramine maleate 6.25 mg., pyrilamine maleate 6.25 mg.); Trisulfapyrimidines, U.S.P. 0.5 Gm. (sulfadiazine 0.167 Gm., sulfamerazine 0.167 Gm., sulfamethazine 0.167 Gm.)

PHARMACOLOGY: Triaminic decongests and promotes drainage of nasal and paranasal passages, and prevents any further histamine-induced damage; the triple sulfonamides inhibit susceptible bacterial invaders. INDICATIONS: For congestion and infection of the upper respiratory tract caused by sulfa-susceptible organisms. DOSAGE: Adults: 2 to 4 tablets initially, followed by 2 tablets every 6 hours. Medication should be continued until patient has been afebrile for 3 days. ADVANTAGES: The advantages of Trisulfaminic in upper respiratory infections are: freedom from narcotics or alcohol; therapeutic reliability; safety; economy; ease of administration; freedom from potential sensitization to broad-spectrum antibiotics which may be reserved for lower respiratory or other infections caused by susceptible organisms. CONTRAINDICATIONS: Contraindicated in sulfonamide and antihistamine sensitivity, impaired renal function, pregnancy approaching term, and in premature infants and newborn infants during the first month of life. Do not use in patients with glaucoma, prostatic hypertrophy, stenosing peptic ulcer, pyloroduodenal or bladder neck obstruction. WARNING: Use only after careful evaluation in patients with liver or renal damage, urinary obstruction, or blood dyscrasias. Deaths have been reported from hypersensitivity reactions with administration of sulfonamides. In intermittent or prolonged therapy, blood counts and liver and kidney function tests should be performed periodically. Sulfonamide therapy may potentiate the hypoglycemic action of sulfonylureas. PRECAUTIONS: Use with caution in patients with histories of significant allergy or asthma. Assure an adequate fluid intake. Because the antihistamines may cause drowsiness of varying degree, warn patients about activities requiring alertness such as driving a car or operating dangerous machinery. Use with caution in the presence of hypertension, hyperthyroidism, cardiovascular disease and diabetes. ADVERSE REACTIONS: As in all sulfonamide therapy, the following reactions may occur: headache, nausea, vomiting, diarrhea, icterus, hepatitis, pancreatitis, urticaria, rash, fever, cyanosis, hematuria, crystalluria, proteinuria, blood dyscrasias, petechiae, purpura, neuropathy and injection of the conjunctiva and sclera. If one or more of these reactions occur, the drug should be discontinued. With antihistaminic therapy there have been reports of sedation varying from mild drowsiness to deep sleep, dizziness, lassitude, inability to concentrate, fatigue, incoordination, tinnitus, blurred vision, diplopia, euphoria, nervousness, insomnia, tremors, palpitation, hypotension, headache, chest tightness, urinary frequency, dysuria, tingling of the hands, dryness of the mouth, throat, and nose, gastrointestinal disturbances such as epigastric distress, anorexia, nausea, vomiting, constipation and diarrhea and very rarely, leukopenia and agranulocytosis. Adverse reactions reported with the use of sympathomimetic amines include anxiety, tension, restlessness, nervousness, tremor, weakness, insomnia, headache, palpitation, tachycardia, angina, elevation of blood pressure, sweating, mydriasis, anorexia, nausea, vomiting, dizziness, constipation, and dysuria due to vesicle sphincter spasm. PACKAGE INFORMATION: Trisulfaminic Tablets: Supplied in bottles of 100 tablets. CAUTION: Federal law prohibits dispensing without prescription.

DORSEY LABORATORIES · *a division of The Wander Company* · **LINCOLN, NEBRASKA**

operation of pilot model clinics and comprehensive services in selected hospitals, satellite clinics, schools and related social services, educational health agencies.

This pilot project includes Wayne County, Michigan, including the city of Detroit.

A grant of $1,400,000 has been approved by HEW and is under the direction of Dr. John J. Hanlon, City-County Health Commissioner. This program is for children up to age 21 and will include mass screenings, diagnosis, preventive medicine and medical, surgical, dental, optical and psychological care.

Other Purposes

To establish communications with leaders in the health professions, institutions and agencies including organized medicine and dentistry, and to seek support and participation.

To delineate policies, procedures, guidelines, personnel descriptions and responsibilities, evaluation and performance standards for each phase of the project.

To activate, coordinate and evaluate top care prototype clinics.

To develop and conduct training programs in order to provide career opportunities for young people to enter the health professions; seek affiliations with U of M Schools of Medicine and Public Health, Wayne State Schools of Medicine, Nursing, Education and Social Work and U of D School of Dentistry to provide fetal programs for academic research for undergraduate and graduate students.

Incorporate and implement family planning services at its *broadest* concept.

Seek to modify and establish an enhanced behavioral pattern for self-help.

This is a five-year program, and it is hoped that there will be a continuous program evaluation in objectives, methodology, operational logistics and adjustments for the purpose of determining whether health habits and practices of the poor have been favorably influenced because of this pilot program.

Standards to Be Met

Hospitals:

1. Joint Commission on the Accreditation of Hospitals.
2. Standards and recommendations for hospital care of newborn infants, American Academy of Pediatrics.
3. The care of children in hospitals, American Academy of Pediatrics.

Personnel:

1. Physicians — certification by specialty board f eligibility.
2. Dentists — graduate accredited by Council c Education of the American Dental Associatio Specialist must be board certified or board e gible or otherwise recognized by a componei dental society.
3. Others — standards are also established for pr fessional and practical nurses, nurses' aides, n tritionists, dieticians, social workers, speec pathologists or audiologists, audiometricia and audiometric technicians, physical and occ pational therapists and so forth.

AID TO FAMILIES WITH DEPENDENT CHILDREI

Public Law 74-271, as amended:

Purpose

This program has a twofold purpose: (1) provide monthly cash payments and required me ical care to needy families with dependent childre and (2) to help able-bodied adult relief recipier become self-supporting on a job.

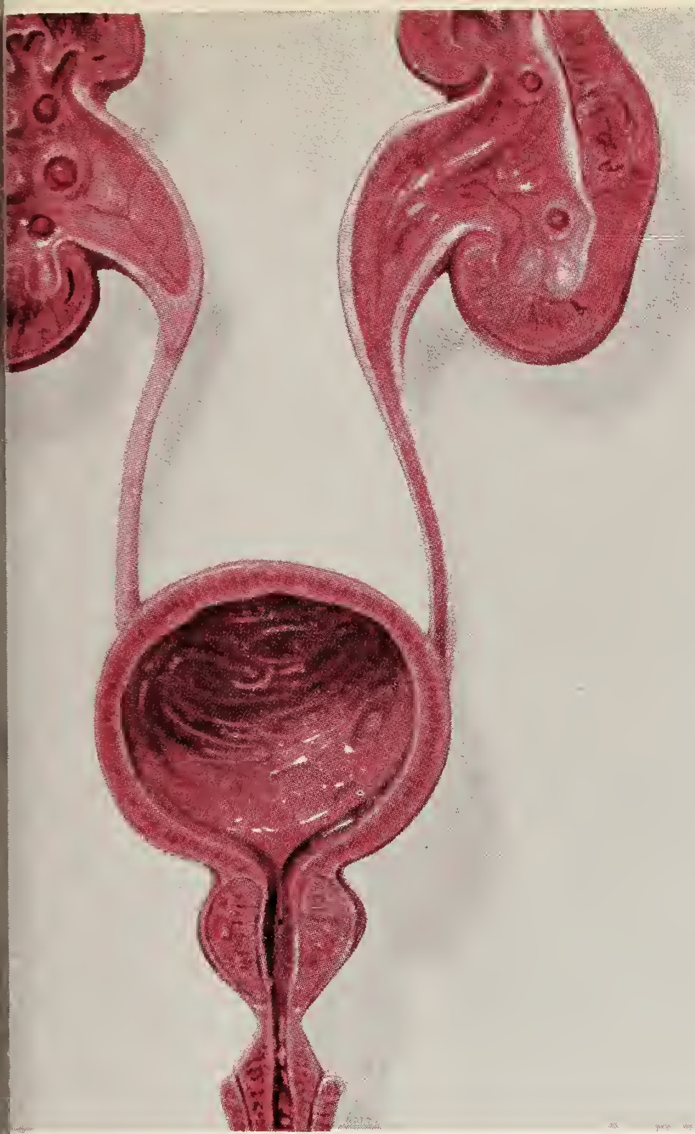
Major Provisions

Under Title IV of the Social Security Act, t federal government makes grants to help all states provide relief payments and supportive se ices to children who are in need because the brea winner is either dead, incapacitated, absent fro home or jobless. Section 409 of the Act, provid for "Community Work and Training Program Under this section, federal funds are available f community projects to provide unemployed fath and other able-bodied adult relief recipients wi useful work experience. A typical work and tra ing program would offer welfare recipients cou seling and guidance; basic education, includi literacy training; constructive work experien skill training; preparation for job hunting; a personalized job placement services by the lo Welfare Department.

Administering Agency

Bureau of Family Services, Welfare Administ tion, U.S. Department of Health, Education a Welfare, Washington, D.C.

(Continued on Page 908)



Diagnosis:

cystitis?
pyelonephritis?
pyelitis?
urethritis?
prostatitis?

in any case,
usually gram-negative*

Therapy:
two 500 mg. Caplets® q.i.d.
(initial adult dose)

NegGram®

Brand of
nalidixic acid

a specific anti-gram-negative

eradicates most urinary tract infections...

- Low incidence of untoward effects; no fungal overgrowth, crystalluria, ototoxic or nephrotoxic effects have been observed.
- "Excellent" or "good" response reported *in more than 2 out of 3* patients with either chronic or acute gram-negative infections.[1]

*As many as 9 out of 10 urinary tract infections are now caused by gram-negative organisms: E. coli, Klebsiella, Aerobacter, Proteus, Paracolon or Pseudomonas[2]... However, infections of the urethra and prostate caused by non-gonococcal gram-negative organisms are believed to be less prevalent.

cations: Urinary tract infections caused by gram-negative and some gram-itive organisms.

e effects: Mainly mild, transient gastrointestinal disturbances; in asional instances, drowsiness, fatigue, pruritus, rash, urticaria, mild inophilia, reversible subjective visual disturbances (overbrightness of ts, change in visual color perception, difficulty in focusing, decrease in al acuity and double vision), and reversible photosensitivity reactions. ked overdosage, coupled with certain predisposing factors, has produced f convulsions in a few patients.

cautions: As with all new drugs, blood and liver function tests are advis- e during prolonged treatment. **Pending further experience, like most motherapeutic agents, this drug should not be given in the first trimester regnancy. It must be used cautiously in patients with liver disease or ere impairment of kidney function.** Because photosensitivity reactions have urred in a small number of cases, patients should be cautioned to avoid ecessary exposure to direct sunlight while receiving NegGram, and if a ction occurs, therapy should be discontinued. The dosage recommended adults and children should not arbitrarily be doubled unless under the eful supervision of a physician. Bacterial resistance may develop.

en testing the urine for glucose in patients receiving NegGram, Clinistix® gent Strips or Tes-Tape® should be used since other reagents give a e-positive reaction.

age: Adults: Four Gm. daily by mouth (2 Caplets® of 500 mg. four times y) for one to two weeks. Thereafter, if prolonged treatment is indicated, dosage may be reduced to two Gm. daily. Children may be given roximately *25 mg. per pound* of body weight per day, administered in ded doses. The dosage recommended above for adults and children uld not arbitrarily be doubled unless under the careful supervision of a sician. Until further experience is gained, infants under 1 month uld not be treated with the drug.

supplied: Buff-colored, scored Caplets® of **500 mg. for adults,** conve- tly available in bottles of 56 (sufficient for one full week of therapy) and in les of 1000. **250 mg. for children,** available in bottles of 56 and 1000.

erences: (1) Based on 23 clinical papers, 1512 cases. Bibliography on uest. (2) Bush, I. M., Orkin, L. A., and Winter, J. W., in Sylvester, J. C.: imicrobial Agents and Chemotherapy—1964, Ann Arbor, American iety for Microbiology, 1965, p. 722.

inthrop

nthrop Laboratories, New York, N. Y. 10016

Costs

For fiscal 1966, Congress appropriated $3 billion to finance grants to states for Public Assistance. Of this total, about $1 billion was for the Aid to Families with Dependent Children Program.

INTERPRETS LAW RE DISPENSING DRUGS

The following will be important to doctors of medicine who dispense drugs as part of their professional practice. This pertains to Public Law 89-74 and is the interpretation of Robert Steeves, Director of the Legal Division, American Pharmaceutical Association.

"In reply to the medical society inquiry on HR-2, you can point out that the patient's medical record will meet the requirements of disposition records under HR-2 provided the physician enters the name, strength, and quantity of the medication dispensed, as well as the date. There may be some question of a physician using the medical record for this purpose however, since he must make the records available to inspectors enforcing the act.

"Traditionally, the patient's medical record has been within the physician-patient privilege. Use of the medical record for compliance with HR-2 may destroy the confidentiality of the medical record and make it subject to disclosure as a record required to be kept under the law. This, in turn, might be a violation of the physician-patient privilege and form the basis of a suit against the physician by the patient. Thus, while the entries on the medical record would comply with part of HR-2, there are other questions which might make such a practice inadvisable. You will recall that we advised against pharmacists using their "pa tient medication records" to meet the requiremen for HR-2, based upon the reasoning that the char would have additional information that shoul remain confidential.

"However, the other aspect of HR-2 is the recor of receipt. Thus, the physician would have t maintain a record of all stimulant and depressan drugs received, including samples. This would ap ply to those drugs received from detail men o through the mail, even if the physician throw them into a waste basket. The law requires th manufacturers, wholesalers, and pharmacists t keep a record of all stimulant and depressant drug delivered to a physician, including samples. Hence a check of the accuracy of the physician's recor would be a simple mathematical problem and th failure to maintain an accurate record is a separat offense under HR-2."

MSMS TAKES STAND ON AIR, WATER POLLUTION

The following statement was approved by th Committee on Respiratory Diseases at its meetin of June 8, 1966, and amended and approved b The Council at its meeting of June 22, 1966:

"The Michigan State Medical Society, throug its Committee on Respiratory Diseases, endorse the principle of reasonable and scientific study d rected toward the sensible control of the majo problems of air pollution, whether this be th dusts or wastes of industry, the products of com bustion of gasoline or oil (automobiles) or th combustion products of home heating and burn ing equipment, or of smoking tobacco. All of thes may have potential effect on man via the respira tory system and are therefore of concern to th physician, especially as they are known to affec health adversely.

"A similar stand is made by the Society in re gard to water pollution."

PLAINWELL SANITARIUM, INC.

Plainwell, Michigan — MU 5-8441

Edwin M. Williamson, M.D.
M. Leroy Barry, M.D.

Dan W. Everett, M.D.
Wilbur R. King, Ph.D.

The Plainwell Sanitarium is a private psychiatric hospital licensed by the Michigan Department of Mental Health, and member of the American Hospital Association, Michigan Hospital Association, and National Association of Private Psychiatric Hospitals. Our extensive diagnostic treatment services include the following:

- Organic and psychological therapy for the psychiatrically and emotionally disturbed of all ages.
- Diagnostic evaluation of neurological disorders.
- Rehabilitative services for geriatric and convalescent patients.
- Medico-Legal counsel.
- Diagnostic and psychological evaluation and hospitalization, if indicated, of juveniles for Probate and Juvenile Courts.

SQUIBB NOTES ON THERAPY

Behind continued high blood pressure readings lies the possibility of organic damage[1-13]

MANY OF THE aspects of essential hypertension are unpredictable—either because there are a number of mechanisms involved or because individuals differ in their responses to these mechanisms.[1]

There is one aspect of hypertension, however, that seems, in many cases, predictable. ". . . when the blood pressure is elevated to a marked degree for an adequate period of time, this in itself leads to perpetuation of the syndrome with resulting vascular damage throughout the body."[14] All too often the disease progresses until there is damage to one of three vital organs: the heart, the kidney, the brain.

> "Hypertension is certainly a major factor in the genesis of coronary heart disease, and it is even more important when compounded with obesity."[4]
>
> "[Vascular deterioration] can be clearly seen in the kidney with a degree of damage that can be measured by renal function studies."[10]

". . . most evidence suggests that reduction of blood pressure, when it is too high, not only relieves the heart of excess work but reduces vascular damage."[1]

"In short, treatment is indicated."[1]

Antihypertensive therapy will not restore the blood vessels to normal. Yet many of the vascular changes and symptoms caused by increased blood pressure may be arrested or alleviated when the blood pressure is reduced to normotensive levels.[7]

Reducing the blood pressure helps curtail further vascular damage and improves the prognosis — when damage is not too far advanced before therapy is started.[14] Essential hypertension is an indication not only for treatment, but for *early* and adequate treatment of the patient in question.

Reduce the blood pressure with Rautrax-N

Rautrax-N combines the antihypertensive-tranquilizing action of whole root rauwolfia with the antihypertensive-diuretic action of bendroflumethiazide in one convenient medication. The two drugs complement each other so that smaller doses of both are possible.

Rauwolfia combined with bendroflumethiazide is particularly effective in long-term therapy,[15-17] since beneficial effects do not diminish with continuous daily administration.

For most patients 1 or 2 Rautrax-N tablets daily are sufficient for maintenance therapy. The simplicity, convenience and economy of such a dosage schedule are of particular benefit to older patients.

References: 1. Page, I. H., and Dustan, H. P.: The Usefulness of Drugs in the Treatment of Hypertension, in Ingelfinger, F. J.; Relman, A. S., and Finland, M.: Controversy in Internal Medicine, Philadelphia, W. B. Saunders Co., 1966, p. 95. **2.** Hollander, W.: The Evaluation of Antihypertensive Therapy of Essential Hypertension in Ingelfinger, F. J.; Relman, A. S., and Finland, M.: Controversy in Internal Medicine, Philadelphia, W. B. Saunders Co., 1966, p. 97. **3.** Nickerson, M.: Antihypertensive Agents and the Drug Therapy of Hypertension, in Goodman, L. S., and Gilman, A.: The Pharmacological Basis of Therapeutics, ed. 3, New York, The Macmillan Co., 1965, p. 727. **4.** Berkson, D. M.: Indust. Med. & Surg. **32**:371, 1963. **5.** Cohen, B. M.: M. Times **91**:645, 1963. **6.** Lee, R. E., et al.: Am. J. Cardiol. **11**:738, 1963. **7.** Moyer, J. H.: Am. J. Cardiol. **9**:821, 1962. **8.** Moser, M.: New York J. Med. **62**:1177, 1962. **9.** Wood, J. E., and Battey, L. L.: Am. J. Cardiol. **9**:675, 1962. **10.** Moyer, J. H., and Heider, C.: Am. J. Cardiol. **9**:920, 1962. **11.** Moser, M., and Macaulay, A. I.: New York State J. Med. **60**:2679, 1960. **12.** Judson, W. E.: Nebraska M. J. 44:305, 1959. **13.** Hodge, J. V.; McQueen, E. G., and Smirk, H.: Brit. M. J. **1**:5218, 1961. **14.** Moyer, J. H., and Brest, A. N.: Hypertension Recent Advances, Philadelphia, Lea & Febiger, 1961, p. 633. **15.** Berry, R. L., and Bray, H. P.: J. Am. Geriatrics Soc. **10**:516, 1962. **16.** Reid, W. J.: J. Am. Geriatrics Soc. **13**:365, 1965. **17.** Feldman, L. H.: North Carolina M. J. **23**:248, 1962.

Contraindications: Severe renal impairment or previous hypersensitivity. **Warning:** Ulcerative small bowel lesions have occurred with potassium-containing thiazide preparations or with enteric-coated potassium salts supplementally. Stop medication if abdominal pain, distension, nausea, vomiting or G.I. bleeding occur.

Precautions and Side Effects: The dose of ganglionic blocking agents, veratrum or hydralazine when used concomitantly must be reduced by at least 50% to avoid orthostatic hypotension. Caution is indicated in patients with depression, suicidal tendencies, peptic ulcer; electrolyte disturbances are possible in cirrhotic or digitalized patients. Marked hypotension during surgery is possible; consider discontinuing two weeks prior to elective surgery and observe patients closely during emergency surgery. Rauwolfia preparations may cause reversible extrapyramidal symptoms and emotional depression, diarrhea, weight gain, edema, drowsiness may occur. Bendroflumethiazide may cause increases in serum uric acid, unmask diabetes, increase glycemia and glycosuria in diabetic patients, and may cause hypochloremic alkalosis, hypokalemia; cramps, pruritus, paresthesias, rashes may occur.

Dosage and Supply: Initial dosage, 1 to 4 tablets daily, preferably at mealtime. Maintenance, 1 or 2 tablets daily. Rautrax-N is supplied as capsule-shaped tablets containing 50 mg. Rauwolfia serpentina whole root (Raudixin®), 4 mg. bendroflumethiazide (Naturetin®), 400 mg. potassium chloride.

Also available: Rautrax-N Modified — capsule-shaped tablets containing 50 mg. Rauwolfia serpentina whole root (Raudixin), 2 mg. bendroflumethiazide (Naturetin), 400 mg. potassium chloride. Both potencies available in bottles of 100. For full information, see Product Brief.

RAUTRAX®-N

Squibb Rauwolfia Serpentina Whole Root (50 mg.) with Bendroflumethiazide (4 mg.) and Potassium Chloride (400 mg.)

SQUIBB

'The Priceless Ingredient' of every product is the honor and integrity of its maker.

Classified Advertising

$2.50 per insertion of fifty words or less, with an additional five cents per word in excess of fifty.

INTERNIST: Join ultramodern clinic with hospital, Detroit suburb. Challenging scientific environment. Salary open. Basic Science certificate required. Write Fairwood General Hospital, 4050 E. 12 Mile Road, Warren, Michigan 48092.

Aggressive GENERAL SURGEON to join dynamic multi-specialty group in suburban Detroit. Additional training in vascular, urological, or orthopedics makes you more desirable. Basic science certificate required for licensure in Michigan. Call 313-755-2500 or write Fairwood General Hospital, 4050 E. 12 Mile Road, Warren, Michigan 48092.

GENERAL PRACTITIONER urgently needed to join 2-man group. New office and new modern hospital. 2 hours from Detroit and a University Hospital. Financial arrangements completely open to discussion. Please phone collect, Malcolm K. Dolbee, M.D. Area code 517, VI 6-2801.

WANTED—Detroit, Michigan, General Practitioner to join a well established general practice group—Metropolitan Detroit. Practice includes Surgery and Obstetrics, excellent hospital affiliations—congenial surroundings. Salary open first year then partnership for right man or woman. Reply Box #33, 120 West Saginaw Street, East Lansing, Michigan 48824.

GENERAL SURGEON—Looking for association with existing group. Received training from large medical center. Prefers lower Michigan. Reply Box 32, 120 W. Saginaw Street, East Lansing, Michigan.

WANTED: Locum Tenens for General Practice for July and or August 1967. Guarantee of $2,000 per month, plus commission. Will furnish residence. Must have Michigan License and references. Reply: F. W. Balice, M.D., 128 E. Butler Street, Adrian, Michigan.

FOR RENT: Doctors eleven-room clinic in Mason, 12 miles from Lansing. Has been occupied by doctors for over 25 years. Wonderful opportunity for professional man to establish a future. Shortage of medical services in this charming and thriving community with many churches and good schools. Contact: Delmar Kramer, Dart National Bank, Mason, Michigan, ORchard 7-3661, evenings ORchard 6-5586.

PHYSICIAN: General practice with six-man hard-working group in suburban Detroit. Delicious salary and future percentage. Write: Fairwood General Hospital, 4050 E. 12 Mile Road, Warren, Michigan.

ATTENTION DUCK HUNTERS: Now is the time to make reservations for hunting Mallards, Blacks and other puddle ducks as well as flight ducks. With my guide service on Northwest Saginaw Bay, I provide decoys, blinds and the world's best layout boats. If interested please write for free 1966 pictured brochure. John Pestrue, Standish, Michigan.

Diagnostic RADIOLOGIST to join dynamic 6 man multi-specialty group with our ultramodern clinic and hospital in Detroit suburb. Science certificate required for license in Michigan. Excellent remuneration. Write Box 34, 120 West Saginaw Street, East Lansing, Michigan 48824.

PSYCHIATRIC RESIDENCIES — Positions available January and July 1967. Fully approved; balanced didactic and clinical program. Three programs from which to choose; Three-Year Program, $8,352 to $9,500; Five-Year Career Program, $9,500 to $17,184; N.I.M.H. General Practitioner stipends, $12,000. Located in Michigan's Water Winter Wonderland. Contact Dr. Paul Kauffman, Director of Training, Traverse City State Hospital, Traverse City, Michigan. An equal opportunity employer.

COMMUNITY IN FLINT area need an active young general physician t join group practice in new offices, an 50 bed hospital. Opportunity now Arrangements open. Contact L. A Phelps, M.D., 10122 Janaroy Court Goodrich, Michigan 48438.

DOCTORS NEEDED IN TROY: Detroit's fastest growing suburb—Present population is over 27,000 an there are no MD's (according t telephone yellow pages). Space available next June or July in new Doctor's Building near the new Yamasaki Office at 16 mile Road and I-7 This mile of Big Beaver from Crook to Livernois could become famous. I could become known as the most outstanding development of its type n only in Michigan but in the whol nation. Brochure available. Angus Mc Lay, Broker: 177 W. Big Beave Troy, Michigan 48084. Phone: 68 0555.

FOR SALE: Physicians office buildin and basic equipment, examining table desks, etc. Suitable for one or tw physicians. Write: Richard G. Ba stow, M.D., 429 N. Center Stree Gaylord, Michigan.

EASTERN WISCONSIN CLINIC i rapidly growing community of 40,00 desires board-eligible or certified physicians in pediatrics, obstetrics an gynecology and internal medicin Well-equipped clinic and excelle hospital facilities. Lake shore locatio offers ample recreational facilities. A tractive financial plan leading to earl full partnership. Full expenses paid f applicants invited to interview. Ca or write: F. L. Hildebrand, M.I Riverside Clinic, Menasha, Wisconsi

SOUTHFIELD TWELVE MILE ARE Custom planned suites to lease. Ampl parking. Occupancy April 1967. Limited number of suites available. Individual suites up to 1600 sq. f Phone EL 6-1550.

Established 1924

MERCYWOOD HOSPITAL

4038 Jackson Road
Conducted by Sisters of Mercy
Ann Arbor, Michigan

Telephone — 313 663-8571

Mercywood Hospital is a private neuro-psychiatric hospital licensed by the Michigan Department of Mental Health. Mercywood specializes in intensive, multidisciplinary treatment for emotional and mental disorders.

Accredited by the Joint Commission on Accreditation of Hospitals and the National League of Nursing. A full Blue Cross participating hospital.

Certified for: Medicare and M.A.A. programs.

PSYCHIATRIC STAFF

Robert J. Bohra, M.D.
Deon P. Corron, M.D.
Francis M. Daignault, M.D.
Gordon C. Dieterich, M.D.
Stuart M. Gauld, Jr., M.D.
Leonard E. Himler, M.D.
Stephen C. Mason, M.D.
Richard D. Watkins, M.D.
Rudolf E. Nobel, M.D.
Sydney Joseph, M.D.
James R. Driver, M.D.

These Advertisers Help Make Michigan Medicine Possible

bott	799, 800, 801, 802
es Co., Inc.	Cover III
erst Laboratories	841, 842, 843
roughs Wellcome & Co.	881
a Pharmaceutical Co.	882, 883
ssified Advertising	910
sey Laboratories	901, 902, 903, 904, 905
gy Pharmaceuticals	845
nbrook (Bayer)	857
k Shoe Co.	798
vlett Packard Co., Sanborn Division	794
son, Westcott & Dunning, Inc.	791
am Co., G.A.	889, 894
st Service Center	896
dall	859
gswood Hospital	862
erle Laboratories	807, 814, 815, 861, 891, 892
, Eli and Co.	816
dical Protective	885
ck Sharp & Dohme	804, 805
cywood Hospital	911
Merrell	886, 887
Noble-Blackmer, Inc.	890
Parke, Davis & Co.	Cover II
Philips Roxane Laboratories	808, 809
Pitman-Moore Division, Dow Chemical Co.	811, 898, 899
Plainwell Sanitarium	908
Professional Management	911
Robins Co., Inc., A.H.	863, 864
Roche Laboratories	Cover IV
Saint John Hospital	878
Sammond Pleasant Lodge	856
Searle	812, 813
Smith Kline & French Laboratories	873
Squibb	869, 879, 909
Stratton, Ben P.	866
Syntex Laboratories	796, 797, 874, 875
Touro Infirmary	867
Tutag, S.J. & Co.	884
Winthrop Laboratories	792, 895, 907

PROFESSIONAL MANAGEMENT FOR PHYSICIANS AND DENTISTS
since 1932
P.M.®

Professional Management

BLACK AND SKAGGS ASSOCIATES
Affiliated Offices

Battle Creek - - - Detroit
Grand Rapids - - - Saginaw
Traverse City - - - Berkley

"SERVING THE MICHIGAN PHYSICIAN FOR OVER 30 YEARS"

Personal Mention

Thomas Francis, Jr., M.D., Ann Arbor, was a member of an eight-member United States delegation to Japan "to formulate research programs for disease problems of major importance in the Asian area." He represented the U.S. State Department.

* * *

Waldo L. Cain, M.D., and Robyn J. Arrington, M.D., both of Detroit, were recently named Physicians of the Year by the Detroit Medical Society during its ninth annual Clinic Day.

* * *

Charles L. Hudson, M.D., Michigan native and President of the American Medical Association, is to speak at the annual Galens Honorary Medical Society Lectureship, February 14, 1967, at the University of Michigan in Ann Arbor.

* * *

S. J. Behrman, M.D., of the Center for Research in Reproductive Biology, University of Michigan School of Medicine, spoke on population control at a series of symposia at the AMA's National Conference on Infant Mortality held in August in San Francisco.

* * *

Harry W. Fischer, M.D., Eloise, will speak on "Lymphangiography in the Diagnosis of Cancer" at the 1967 Scientific Session of the American Cancer Society to be held next May 3 in Dallas.

* * *

Robert J. Bolt, M.D., professor of internal medicine at the University of Michigan, resigned his position to accept the appointment as professor and chairman of the department of internal medicine at the University of California Medical School at Davis. Prior to joining the University faculty in 1951, Doctor Bolt served as a resident in medicine for three years at Butterworth Hospital in Grand Rapids.

MSMS Past President George W. Slagle, M.D., Battle Creek, was the official American Medical Association representative to the 9th International Congress of Internal Medicine in Amsterdam, September 7-10.

* * *

William W. Tourtellotte, M.D., University of Michigan Medical Center, served as visiting professor during September, at Gottingen, Germany; the National Hospital at Queens Square, London; and the University of Newcastle. Following these visits Doctor Tourtellotte travelled to Holland to address a symposium hosted by the Dutch Academy of Science.

* * *

L.D. Funk, M.D., Athens, has been awarded an honorary degree from the University of Michigan, where he received his M.D. degree fifty years ago.

* * *

One of the 12 annual Mead Johnson Awards for Graduate Training in General Practice was presented by Edgar G. Cochrane, M.D., Detroit, President of the Michigan Academy of General Practice, to Michael D. Gadwell, M.D., intern at Oakwood Hospital. The $1,000 award is given to help defray the expenses of a year's training in a general practice residency.

* * *

John M. Roberts, Ph.D., Chief of the Diagnostic Microbiology Section, Michigan Department of Public Health, has retired after 20 years' service in the department to become Chairman of the Division of Science and Mathematics of Olivet College.

The new finance chairman
the Gratiot County Republi
Committee is John M. Stack, M
Alma.

* * *

The newly-elected president
the Detroit Dermatological Soc
for 1966-67 is Arthur P. Wil
M.D., Windsor, Ontario. Other
ficers are: President-Elect, Rol
J. Schoenfeld, M.D., Birmingh
Secretary-Treasurer, Robert
Burns, M.D., Detroit; and Rec
er, Harold Plotnick, M.D., Det

* * *

University of Michigan genet
Margery Shaw, M.D., rece
helped direct an internatic
workshop to consider standarc
tion of human chromosome c
and organization of a central c
genetics registry.

"If we scientists are able to
our knowledge we'll have be
estimates of the risks of abnor
babies to a particular couple.
doctors we'll be able to cou
parents much more effective
Doctor Shaw pointed out.

The conference, to which
scientists from 10 countries
invited, was sponsored by the
tional Foundation March of Di
at the University of Chicago.

* * *

Recently-appointed superin
dent at the Newberry State Ho
tal is William R. Purmort, M
who was promoted to the
position from acting superin
dent. Doctor Purmort has
with the Hospital for 20 y
He succeeds Richard R. Came
M.D., who resigned to direct
Shiawassee County mental he
program.

* * *

Donald L. Trepanier, Ph.D.
cently promoted to Associate Sc
tist in the Chemistry Research
partment of Pitman-Moore
search Center, a division of
Dow Chemical Company, rece
his Ph.D. in pharmaceutical cl
istry in 1957 from the Unive
of Michigan.

lood-glucose
creening for all
our patients?

cause "Abnormalities of glucose
bolism are among the [most
mon] encountered in clinical
tice...."* Simple, quick, econom-
blood-glucose screening
DEXTROSTIX® Reagent Strips is
icable in every regular physical
nination, emergency situation,
vhenever hypo- or hyper-
mia may be of clinical
ficance—for "The precision
ccuracy of DEXTROSTIX
et the need for an always
able simple screening
od...."* All that is required
reening with
ROSTIX is 60 seconds
globular drop of
ary or venous blood.
rmal readings will be
able aid to diagnosis;
als will help you
lish an important
ine for future reference.

V., and Dawson, A.:
J. 1:293, 1965.

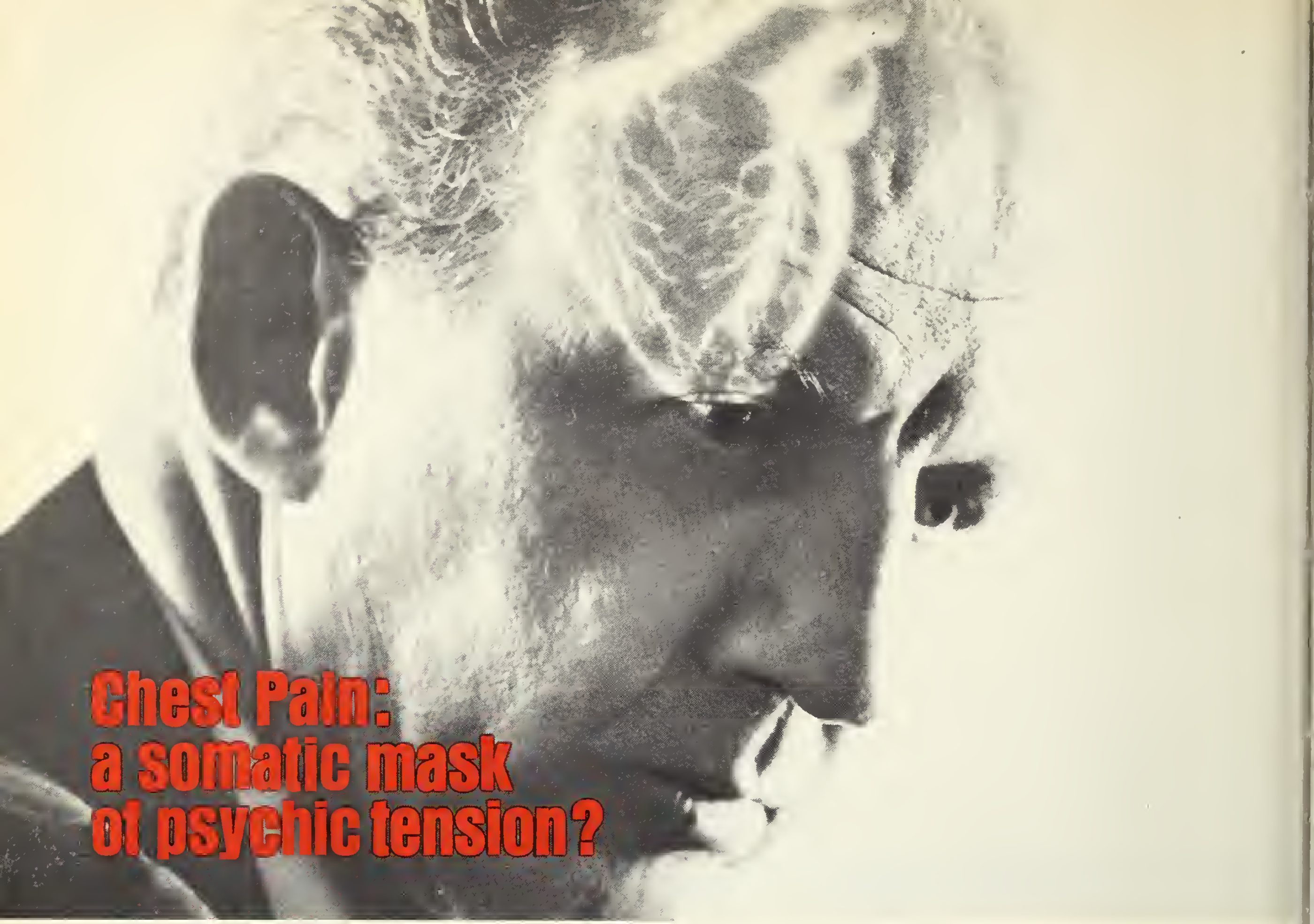
XTROSTIX—
des a clinically useful
mination when performed
rding to directions†

OSTIX is not intended to replace
re precise analytical laboratory methods.

es—all your patients

AMES COMPANY, INC.
Elkhart, Indiana
AMES

09165



"Heart symptoms"—chest pain, tachycardia, arrhythmia—invariably alarm and preoccupy the patient, though they may be completely without organic basis. Such symptoms often are somatic masks of psychic tension, arising from constant encounters with stressful situations.

When the problem is diagnosed as emotionally produced, consider Valium (diazepam) as adjunctive therapy. Valium (diazepam) acts rapidly to calm the patient, to reduce his psychic tension and relieve associated cardiovascular complaints.

NEUROTIC FATIGUE—the chronic tiredness resulting from emotional strain which so often accompanies psychogenic "heart" symptoms—also can be alleviated by this highly useful agent. Valium (diazepam) often achieves results where other psychotherapeutic agents have failed.

Valium (diazepam) is generally well tolerated, and usually does not impair mental acuity or ability to function. If side effects such as ataxia and drowsiness occur, they usually disappear with dosage adjustment.

Contraindications: Infants, patients with history of convulsive disorders or glaucoma.

Warning: Not of value in the treatment of psychotic patients, and should not be employed in lieu of appropriate treatment.

Precautions: Limit dosage to smallest effective amount in elderly patients (not more than 1 mg, one or two times daily) to preclude ataxia or oversedation. Advise patients against possibly hazardous procedures until correct maintenance dosage is established; driving during therapy not recommended. In general, concurrent use with other psychotropic agents is not recommended. Warn patients of possible combined effects with alcohol. Safe use in pregnancy not established. Observe usual precautions in impaired renal or hepatic function and in patients who may be suicidal; periodic blood counts and liver function tests advisable in long-term use. Cease therapy gradually.

Side Effects: Side effects (usually dose-related) are fatigue, drowsiness and ataxia. Also reported: mild nausea, dizziness, blurred vision, diplopia, headache, incontinence, slurred speech, tremor and skin rash; paradoxical reactions (excitement, depression, stimulation, sleep disturbances and hallucinations) and changes in EEG patterns. Abrupt cessation after prolonged overdosage may produce withdrawal symptoms similar to those seen with barbiturates, meprobamate and chlordiazepoxide HCl.

Dosage — Adults: Mild to moderate psychoneurotic reactions, 2 to 5 mg b.i.d. or t.i.d.; severe psychoneurotic reactions, 5 to 1 mg t.i.d. or q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hrs then 5 mg t.i.d. or q.i.d. as needed; muscle spasm with cerebra palsy or athetosis, 2 to 10 mg t.i.d. or q.i.d. Geriatric patients: 1 or 2 mg/day initially, increase gradually as needed.

Supplied: Tablets, 2 mg, 5 mg and 10 mg; bottles of 50 for convenience and economy in prescribing.

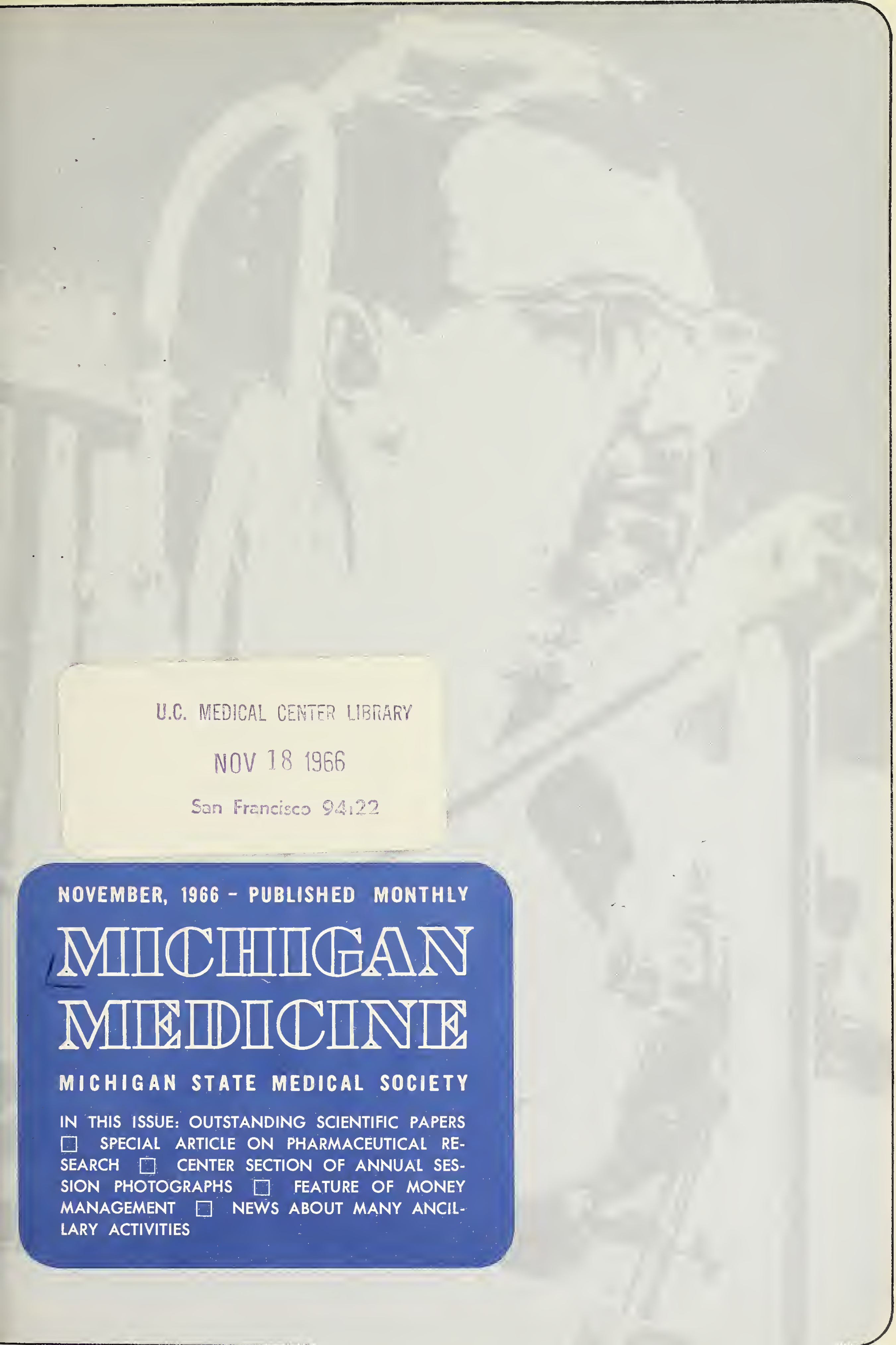
Roche Laboratories Division of Hoffmann-La Roche Inc.
Nutley, N.J. 07110

for somatic symptoms of psychic tension

• 2-mg, 5-mg, 10-mg tablets

Valium®
(diazepam)

ROCHE



U.C. MEDICAL CENTER LIBRARY
NOV 18 1966
San Francisco 94122

NOVEMBER, 1966 - PUBLISHED MONTHLY

MICHIGAN MEDICINE

MICHIGAN STATE MEDICAL SOCIETY

IN THIS ISSUE: OUTSTANDING SCIENTIFIC PAPERS ☐ SPECIAL ARTICLE ON PHARMACEUTICAL RESEARCH ☐ CENTER SECTION OF ANNUAL SESSION PHOTOGRAPHS ☐ FEATURE OF MONEY MANAGEMENT ☐ NEWS ABOUT MANY ANCILLARY ACTIVITIES

some allergens are red...
whatever their color, shape, or size...
Benadryl®
(diphenhydramine hydrochloride)
PARKE-DAVIS
for control of allergic symptoms

Whether the allergen is red and round, or unseen and unknown, BENADRYL provides relief of symptomatic distress through its antihistaminic and antispasmodic actions. *PRECAUTIONS:* Persons who have become drowsy on this or other antihistamine-containing drugs, or whose tolerance is not known, should not drive vehicles or engage in other activities requiring keen response while using this product. Hypnotics, sedatives, or tranquilizers if used with BENADRYL should be prescribed with caution because of possible additive effect. Diphenhydramine has an atropine-like action which should be considered when prescribing BENADRYL. *SIDE EFFECTS:* Side reactions, commonly associated with antihistaminic therapy and generally mild, may affect the nervous, gastrointestinal, and cardiovascular systems. Most frequent reactions are drowsiness, dizziness, dryness of the mouth, nausea, and nervousness. BENADRYL is available in Kapseals® of 50 mg. and Capsules of 25 mg. 00666

PARKE-DAVIS

PARKE, DAVIS & COMPANY, Detroit, Michigan 48232

1866 1966
100th
ANNIVERSARY

Lutrexin®

HW&D BRAND OF LUTUTRIN

3000 UNIT TABLETS

IN THE TREATMENT OF FUNCTIONAL DYSMENORRHEA ND SELECTED CASES OF PREMATURE LABOR AND 2ND AND 3RD TRIMESTER THREATENED ABORTION

In controlling abnormal uterine activity, LUTREXIN, the non-steroid "uterine relaxing factor" has been found to be the drug of choice by many clinicians.

No side effects have been reported, even when massive doses (25 tablets per day) were administered.

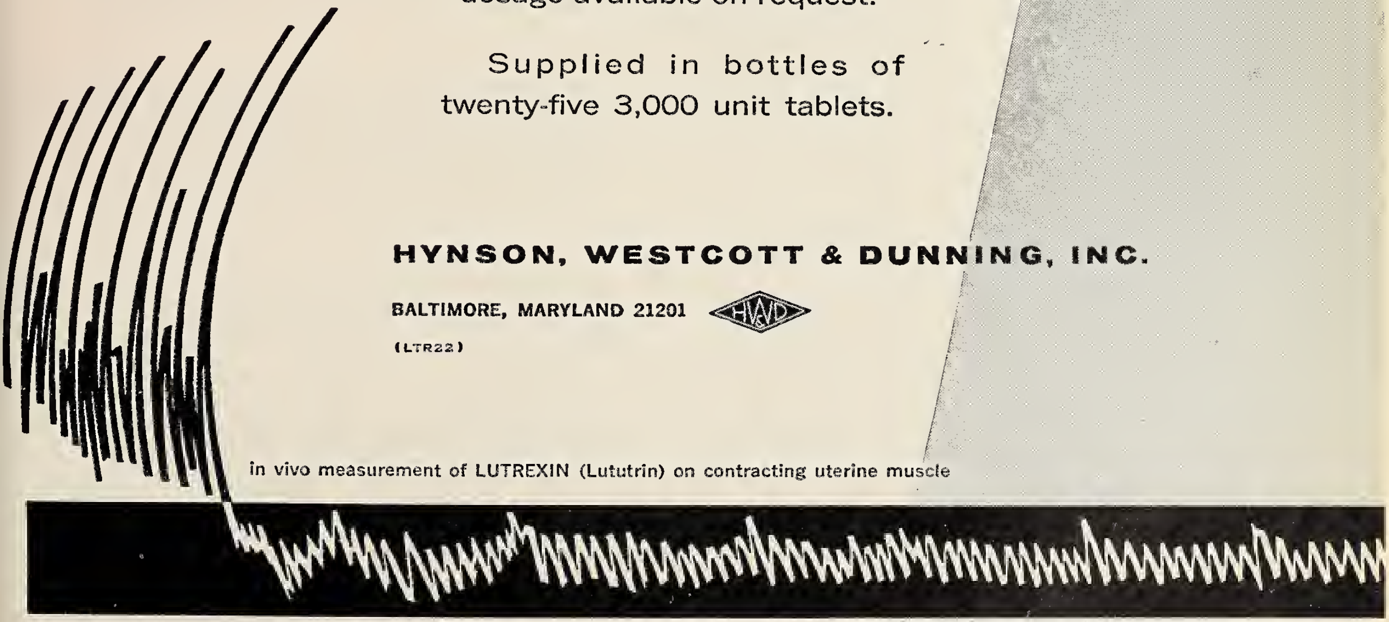
Literature on indications and dosage available on request.

Supplied in bottles of twenty-five 3,000 unit tablets.

HYNSON, WESTCOTT & DUNNING, INC.

BALTIMORE, MARYLAND 21201 HW&D

(LTR22)



in vivo measurement of LUTREXIN (Lututrin) on contracting uterine muscle

Diagnosis:

cystitis?
pyelonephritis?
pyelitis?
urethritis?
prostatitis?

in any case,
usually gram-negative*

Therapy:
two 500 mg. Caplets® q.i.
(initial adult dose)

NegGram
Brand of
nalidixic aci
a specific anti-gram-negative

eradicates most urinary tract infections...

- Low incidence of untoward effects; no fungal overgrowth, crystalluria, ototoxic or nephrotoxic effects have been observed.
- "Excellent" or "good" response reported *in more than 2 out of 3* patients with either chronic or acute gram-negative infections.[1]

*As many as 9 out of 10 urinary tract infections are now caused by gram-negative organisms: E. coli, Klebsiella, Aerobacter, Proteus, Paracolon or Pseudomonas[2]... However, infections of the urethra and prostate caused by non-gonococcal gram-negative organisms are believed to be less prevalent.

Indications: Urinary tract infections caused by gram-negative and some gram-positive organisms.

Side effects: Mainly mild, transient gastrointestinal disturbances; in occasional instances, drowsiness, fatigue, pruritus, rash, urticaria, mild eosinophilia, reversible subjective visual disturbances (overbrightness of lights, change in visual color perception, difficulty in focusing, decrease in visual acuity and double vision), and reversible photosensitivity reactions. Marked overdosage, coupled with certain predisposing factors, has produced brief convulsions in a few patients.

Precautions: As with all new drugs, blood and liver function tests are advisable during prolonged treatment. **Pending further experience, like most chemotherapeutic agents, this drug should not be given in the first trimester of pregnancy. It must be used cautiously in patients with liver disease or severe impairment of kidney function.** Because photosensitivity reactions have occurred in a small number of cases, patients should be cautioned to avoid unnecessary exposure to direct sunlight while receiving NegGram, and if a reaction occurs, therapy should be discontinued. The dosage recommended for adults and children should not arbitrarily be doubled unless under the careful supervision of a physician. Bacterial resistance may develop.

When testing the urine for glucose in patients receiving NegGram, Clinistix® Reagent Strips or Tes-Tape® should be used since other reagents give a false-positive reaction.

Dosage: Adults: Four Gm. daily by mouth (2 Caplets® of 500 mg. four times daily) for one to two weeks. Thereafter, if prolonged treatment is indicated, the dosage may be reduced to two Gm. daily. Children may be given approximately *25 mg. per pound* of body weight per day, administered in divided doses. The dosage recommended above for adults and children should not arbitrarily be doubled under the careful supervision of a physician. Until further experience is gained, infants under 1 month should not be treated with the drug.

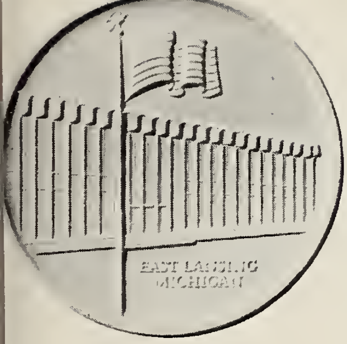
How supplied: Buff-colored, scored Caplets® of **500 mg. for adults,** conveniently available in bottles of 56 (sufficient for one full week of therapy) and in bottles of 1000. **250 mg. for children,** available in bottles of 56 and 1000.

References: (1) Based on 23 clinical papers, 1512 cases. Bibliography on request. (2) Bush, I. M., Orkin, L. A., and Winter, J. W., in Sylvester, J. C.: Antimicrobial Agents and Chemotherapy—1964, Ann Arbor, American Society for Microbiology, 1965, p. 722.

Winthrop
Winthrop Laboratories, New York, N. Y. 10016

NOVEMBER, 1966
VOLUME 65, NUMBER 11
PUBLISHED MONTHLY BY MICHIGAN STATE MEDICAL SOCIETY

MICHIGAN MEDICINE



BLICATION COMMITTEE
ADLEY M. HARRIS, M.D., Ypsilanti
Chairman
C. HANSEN, M.D., Battle Creek
L. MASTERS, M.D., Fremont
W. MCLEAN, M.D., Detroit
H. RODDA, M.D., Bay City
J. TALLANT, M.D., Detroit
LTON R. WEED, M.D., Grosse Pte. Park

entific Editor
ORGE H. LOWREY, M.D.

naging Editor
RBERT A. AUER

MS Executive Director and siness Manager
GH W. BRENNEMAN

he cover photo and the article o pages 992 and 993 provide a r ort to MSMS members on the s ial and economic aspects of t prescription drug industry.

SCIENTIFIC ARTICLES

949 Use of Furosemide, A New Oral Diuretic, In the Nephrotic Syndrome/Gerard Gros, M.D., James A. Greene, Jr., M.D., John M. Weller, M.D.
953 "Active" Tuberculosis Contacts A Guide in Tuberculosis Control/Oscar Bigman, M.D., Margaret E. Berger
955 On the Nature of Memory/Elliot D. Luby, M.D.
962 Sex Education of the Adolescent: How? Where? When?/Paul R. Patterson, M.D.
965 Early Strategies in the Treatment of the Alcoholic/Jose J. Llinas, M.D.
980 A Study of Susceptibility and Immunity to Measles/Arthur W. Newitt, M.D., M.P.H.

SPECIAL ARTICLES

992 Pharmaceutical Research Saves Lives
1017 Constructive Dissonance/T. J. Dillon, M.D.
1030 Art and Medicine: The Art of Kaethe Kollwitz
President's Page 917, 920
State Society 925, 927, 928
In Memoriam 937, 938, 940
From the Mailbag 942
Mediscene 947
Ancillary 947, 996, 1002, 1003, 1006, 1034, 1041, 1042, 1043
Annual Session Photos/News 971
Viewpoints 984, 986
Socio-Economics 1035, 1036, 1039, 1040
Personal Mention 1046

Published monthly, except two extra issues to be published in November and January, by the Michigan State Medi- c Society as its official journal. Second class postage paid at Lansing, Michigan. Yearly subscription rate, $9.00; single c ies, 80 cents. Additional postage: Canada, $1.00 per year; Pan-American Union, $2.50 per year; Foreign, $2.50 per y r. Printed in USA. All communications relative to manuscripts, advertising, news, exchanges, etc., should be addressed t Publications Committee, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48823.
©1966 Michigan State Medical Society.
Phone: Area Code 517, 337-1351.

Most of my patients with high blood pressure are as old as I am. A lot of them are living on pensions. They're grateful when I can keep prescription costs down.

Regroton®
chlorthalidone 50 mg. reserpine 0.25 mg.

1 tablet daily brings pressure down

Advantage: Both components of Regroton are long-acting.
Average dosage: One tablet daily with breakfast.
Contraindications: History of mental depression, hypersensitivity, and most cases of severe renal or hepatic diseases.
Warning: Discontinue 2 weeks before general anesthesia, 1 week before electroshock therapy, and if depression or peptic ulcer occurs. With administration of enteric-coated potassium supplements, the possibility of small bowel lesions should be kept in mind.
Precautions: Reduce dosage of concomitant antihypertensive agents by one-half. Discontinue if the BUN rises or liver dysfunction is aggravated. Electrolyte imbalance and potassium depletion may occur; take particular care in cirrhosis or severe ischemic heart disease, and in patients receiving corticosteroids, ACTH, or digitalis. Salt restriction is not recommended. Use with caution in patients with ulcerative colitis, gallstones, or bronchial asthma.
Side effects: Nausea, vomiting, diarrhea, muscle cramps, headaches and dizziness. Potential side effects include angina pectoris, anxiety, depression, drowsiness, hyperglycemia, hyperuricemia, lassitude, leukopenia, nasal stuffiness, nightmare, purpura, urticaria, and weakness.
For full details, see the complete prescribing information.
Availability: Bottles of 100 and 1000 tablets

Geigy

How Would You Change Graduate Medical Education?

It can be argued that every Michigan physician should read the new AMA pocketbook "The Graduate Education of Physicians."

The book is the report of "Citizens Commission on Graduate Medical Education" appointed several years ago to analyze current programs of medical education and to recommend improvements.

MSMS members with responsibilities for continuing education efforts of medical schools, hospitals, county societies, specialty organizations, etc., especially should read the book.

MSMS members who seek to counsel and advise legislators and political parties will want to study the conclusions of the committee.

The book also should be brought to the attention of hospital boards by interested physicians.

* * *

THE PREFACE CLEARLY stresses the importance of this AMA effort to look at graduate medical education. In part, it states "the system of graduate medical education has become established and now constitutes the larger half of the formal education of the physician."

The Commission Report (known popularly as the Millis Report, for its chairman John S. Millis) makes 17 recommendations to the medical profession. These are offered "because we believe they can go far to reduce the intensity of some of the problems" in the medical educational field.

The Commission voices its concern about the lack of a more closely knit continuum of medical education. The Commission evaluates the present system of medical education as "not able to keep up with the forces and trends affecting medical practice" and not able to shape the demand for health care.

The Commission declared, "The three stages — medical school, internship, and residency — largely go their separate ways because each is a product of its own history. The system as a whole is the victim of the fact that those histories have been separate."

* * *

MSMS MEMBERS READING the book will be interested in several chapters of specific interest in Michigan. These might include such topics as "The Organization and Control of Medical Education," "Major Trends in Medical Education and Practice," and "The University Medical Center and Graduate Medical Education." Some Michigan physicians might have personal interest in the comments about "The Teaching Physician," "The Practice of Comprehensive Health Care" or "Urbanization and Mobility."

The Commission, in one of the 17 recommendations, urges the establishment of a new Commission on Graduate Medical Education to deal with major problems in medical education. Such a new Commission, it was argued, "would enable the medical profession to adapt to changing demands and opportunities more rapidly and constructively in the future than it has in the past."

The MSMS House of Delegates and MSMS Committees each year spend many hours discussing and studying medical manpower and distribution puzzles. The proposed Commission on Graduate Medical Education, it is proposed, could work to determine and achieve better balances of specialties.

The report directs such questions to a proposed Commission as these: "Of all physicians in practice, will the nation need twice as high a proportion of surgeons, psychiatrists and pathologists in the future as it has now? Will the comparative small increases in numbers of pediatricians and internists that appear probable be enough? If the present distribution among the specialties is satisfactory, what evidence is there that the distribution forecast by the current trends will be? Or do

(Continued on Page 920)

MSMS President

C. Allen Payne, M.D.

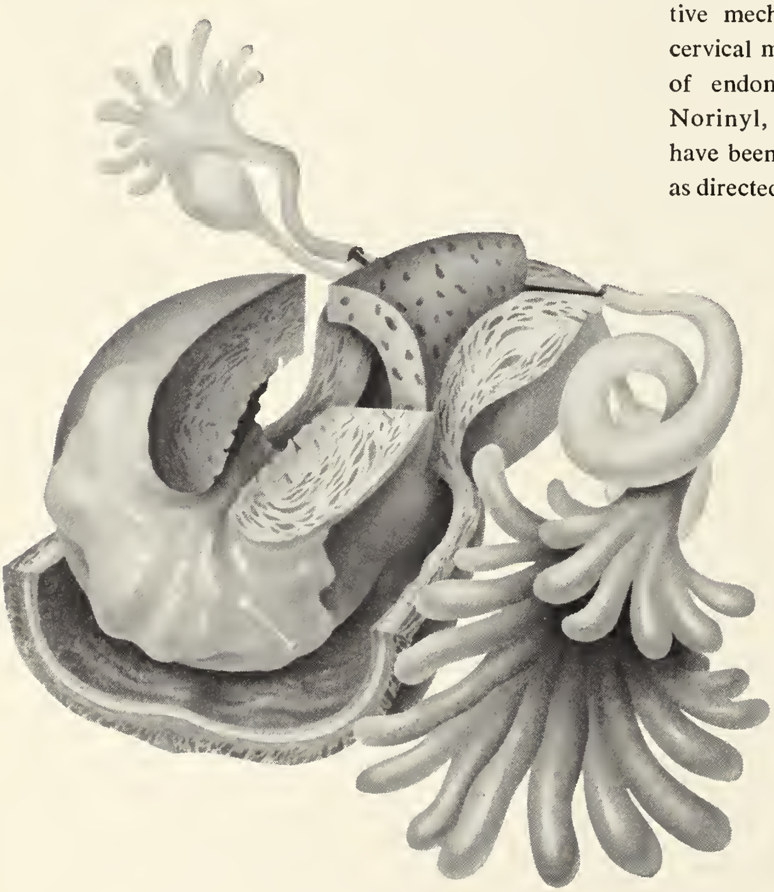
Norinyl® tablets
(norethindrone 2 mg. c̄ mestranol 0.1 mg.)

for multiple contraceptive action that has produced a record of unexcelled effectiveness

inhibition of ovulation by means of 2 time-proved hormonal agents

production of a cervical mucus hostile to sperm motility and vitality

creation of an endometrium unreceptive to egg implantation



no unplanned pregnancies

Norinyl provides multiple action for maximum assurance of success. It does not depend on ovulation inhibition alone for contraceptive effectiveness. The mechanism of action of combined hormonal therapy results in ovulation inhibition reinforced by other protective mechanisms, including a hostile cervical mucus[1-13] and an acceleration of endometrial changes.[1-3,7-16] With Norinyl, no unplanned pregnancies have been reported to date when used as directed.

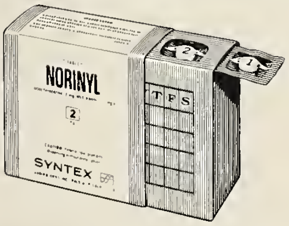
plus important supportive benefits that help her through those critical early months of oral contraception

low incidence of side effects

Low incidence of BTB and spotting, nausea and amenorrhea tends to minimize side effect problems and increases patient cooperation.

no confusion about dosage

An unbreakable "confusionproof" package makes it easy to adhere to prescribed dosage schedule: individually sealed tablets numbered from 1 through 20 *plus* monthly calendar record enables patient to double-check dosage intake by day and corresponding tablet number.



Contraindications: Thrombophlebitis or pulmonary embolism (current or past). Existing evidence does not support a causal relationship between use of Norinyl and development of thromboembolism. While a study which was conducted does not resolve definitively the possible etiologic relationship between progestational agents and intravascular clotting, it tends to confirm the findings of the Ad Hoc Advisory Committee appointed by the Food and Drug Administration to review this possibility. Cardiac, renal or hepatic dysfunction. Carcinoma of the breast or genital tract. Patients with a history of psychic depression should be carefully studied and the drug discontinued if depression recurs to marked degree. Patients with a history of cerebral vascular accident.

Warning: Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions, medication should be withdrawn.

Precautions: By May 1963, experience with norethindrone 2 mg.—mestranol 0.1 mg. had extended over 24 months. Through miscalculation, omission or error in taking the recommended dosage of Norinyl, pregnancy may result. If regular menses fail to appear and treatment schedule has not been adhered to, or if patient misses two menstrual periods, possibility of pregnancy should be resolved before resuming Norinyl. If pregnancy is established, Norinyl should be discontinued during period of gestation since virilization of the female fetus has been reported with oral use of progestational agents or estrogen. When lactation is desired, withhold Norinyl until nursing needs are established. Existing uterine fibroids may increase in size. In metabolic or endocrine disorders, careful clinical preevaluation is indicated. A few patients without evidence of hyperthyroidism had elevated serum protein-bound iodine levels, which in the light of present knowledge, does not necessarily imply hyperthyroidism. Protein-bound iodine increased following estrogen administration. Bromsulphalein retention has occurred in up to 25% of patients without evidence of hepatic dysfunction. Studies from 24-hour urine collections have shown an increase in aldosterone and 17-ketosteroids and decrease in 17-hydroxycorticoid levels. Thus, Norinyl should be discontinued prior to and during thyroid, liver or adrenal function tests. Because progestational agents may cause fluid retention, conditions such as epilepsy, migraine and asthma require careful observation. Thus far no deleterious effect on pituitary, ovarian or adrenal function has been noted; however, long-range possible effect on these and other organs must await more prolonged observation. Norinyl should be used with caution in patients with bone, renal or any disease involving calcium or phosphorus metabolism.

Side Effects: Intermenstrual bleeding; amenorrhea; symptoms resembling early pregnancy, such as nausea, breast engorgement or enlargement, chloasma and minor degree of fluid retention (if these should occur and patient has not strictly adhered to medication plan, she should be tested for pregnancy); weight gain; subjective complaints such as headache, dizziness, nervousness, irritability; in a few patients libido was increased. In a total of 3,090 patients, 2.2% discontinued medication because of nausea.

NOTE: See sections on contraindications and precautions for possible side effects on other organ systems.

Dosage and Administration: One Norinyl tablet orally for 20 days, commencing on day 5 through and including day 24 of the menstrual cycle. (Day 1 is the first day of menstrual bleeding.)

Availability: Dispensers of 20 and 60 tablets; bottles of 100.

References: **1.** Council on Drugs. JAMA 187:664 (Feb. 29) 1964. **2.** Brvans, F. E.: Canad Med Ass J 92:287 (Feb. 6) 1965. **3.** Goldzieher, J. W.: Med Clin N Amer 48:529 (Mar.) 1964. **4.** Cohen, M. R.: Paper presented at Symposium on Low-Dosage Oral Contraception, Palo Alto, Calif., July 15, 1965. Reported in Med Sci 16:26 (Nov.) 1965. **5.** Hammond, D. O.: Ibid. **6.** Rice-Wray, E., Goldzieher, J. W., and Aranda-Rosell, A.: Fertil Steril 14:402 (Jul.-Aug.) 1963. **7.** Goldzieher, J. W., Moses, L. E., and Ellis, L. T.: JAMA 180:359 (May 5) 1962. **8.** Kempers, R. D.: GP 29:88 (Jan.) 1964. **9.** Tyler, E. T.: JAMA 187:562 (Feb. 22) 1964. **10.** Rudel, H. W., Martinez-Manautou, J., and Maqueo-Topete, M.: Fertil Steril 16:158 (Mar.-Apr.) 1965. **11.** Flowers, C. E., Jr.: N Carolina Med J 25:139 (Apr.) 1964. **12.** Goldzieher, J. W.: Appl Ther 6:503 (June) 1964. **13.** The Control of Fertility. Report adopted by the Committee on Human Reproduction of the American Medical Association. JAMA 194:462 (Oct. 25) 1965. **14.** Flowers, C. E., Jr.: JAMA 188:1115 (June 29) 1964. **15.** Merritt, R. I.: Appl Ther 6:427 (May) 1964. **16.** Newland, D. O.: Paper presented at Symposium on Low-Dosage Oral Contraception, Palo Alto, Calif., July 15, 1965. Reported in Med Sci 16:26 (Nov.) 1965.

norethindrone—an original steroid from

SYNTEX

LABORATORIES INC., PALO ALTO, CALIF.

Norinyl® tablets

(norethindrone 2 mg c̄ mestranol 0.1 mg)

for multiple contraceptive action

current trends forecast a better distribution of specialists in the future than we have now?"

* * *

MSMS MEMBERS—WHETHER they are concerned primarily in the delivery of medical care or in medical education—will want to study this newly-published report on "The Graduate Education of Physicians." Members are urged to relay their reactions to the MSMS delegates to the AMA. The report formally was submitted to the AMA Board of Trustees for its consideration.

Here is an ideal opportunity for MSMS and its AMA delegates to play a leadership role in evaluating this excellent document and its 17 provocative recommendations.

To obtain a copy of this pocketbook write to MSMS, 120 West Saginaw, East Lansing.

LANSING—A record 160,000 teen-agers will be taking driver education in Michigan this year.

More than a million Michigan boys and girls will have completed driver education courses since 1956 when the Driver Education Law took effect.

THREE PSYCHIATRY SEMINARS SCHEDULED BY WSU

A Postgraduate Seminar in Basic Psychiatry wil be offered by the Wayne State University Department of Psychiatry at the Lafayette Clinic, 7-9 p.m each Tuesday beginning November 15 througl April, 1967.

A Postgraduate Seminar in Advanced Psychiatr will be offered by the Wayne State University Department of Psychiatry at the Lafayette Clinic, 7- p.m. each Tuesday beginning November 1 through April, 1967.

A Postgraduate Seminar in Advanced Pediatri Psychiatry will be offered by the Wayne Stat University Department of Psychiatry at the Lafayette Clinic, 7-8:30 p.m. each Thursday beginning November 17 through April, 1967.

For further information please call Paul Lowinger, M.D., at 965-1200, Extension 240. Thes courses are given by the Department of Psychiatr of Wayne State University and Lafayette Clini and cosponsored by the Michigan Academy o General Practice.

Saint Mary's Hospital
Grand Rapids

GRAND ROUNDS CLINIC DAY

Thursday, December 8

Guest Speakers:

- —**Evan Calkins, M.D.,** State University of New York at Buffalo School of Medicine, and the Buffalo General Hospital
- —**Paul R. Lipscomb, M.D.,** Mayo Clinic
- —**David G. Pugh, M.D.,** Mayo Clinic
- —**Bernard M. Wagner, M.D.,** Mayo Clinic

For details write to Joseph R. Lentini, M.D., Chairman, Publicity Committee, Grand Rounds Program, Saint Mary's Hospital, Grand Rapids.

Doctor,

Here is the Abbott anorectic
program designed to meet
the individual needs of your
overweight patients.

ABBOTT

mood elevation

Abbott
Anorectic
Program

DESOXYN® Gradumet® (methamphetamine hydrochloride)

Smooth appetite control plus mood elevation.

The obese patient on a diet often has to battle depression as well as overweight. Desoxyn Gradumet helps the dieter in both battles by elevating the mood while it curbs the appetite. Thanks to the Gradumet, medication is smoothly released all-day from a single oral dose.

If she can't take plain amphetamine, put her on DESBUTAL® Gradumet

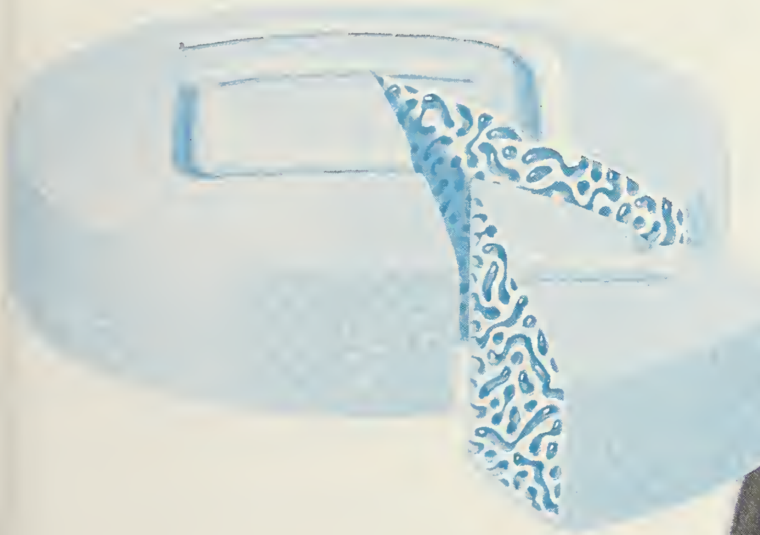
Calms anxieties; controls compulsive eating.

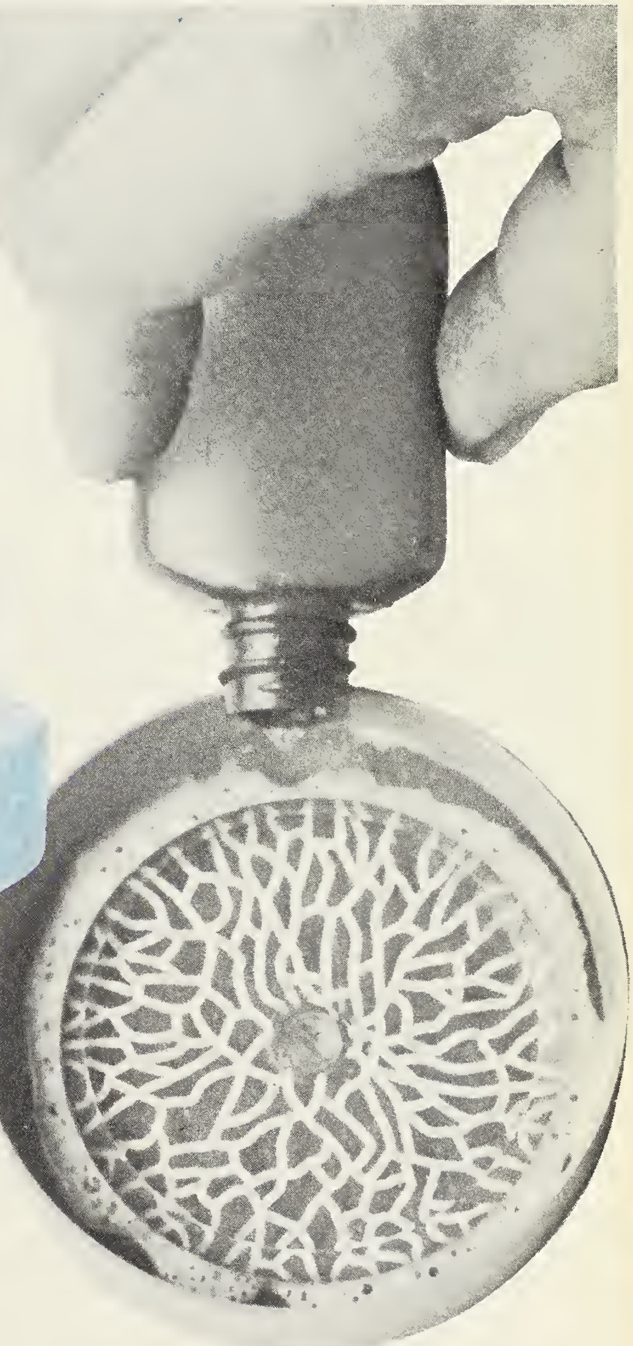
Desbutal Gradumet provides 2 drugs in 2 tablet sections, combined back to back to form a single tablet. One section contains Desoxyn to curb the appetite and lift the mood; the other contains Nembutal® (pentobarbital) to calm the patient and counteract any excessive stimulation.

Both drugs are released in an effective dosage ratio throughout the day.

controlled release

Not all long-release vehicles are the same. Here is why the Gradumet is different and what it means for your overweight patients.





The release action is purely physical and relies on only one factor common to every patient: gastrointestinal fluid. There is no dependence on enteric coatings, enzymes, motility, or an "ideal" ion concentration in the gastrointestinal tract.

Your patients get a measured amount of medication, moment by moment, throughout the day.

They are not subjected to ups and downs of drug release . . . or to erratic release from patient to patient . . . or to erratic release in the same patient from day to day.

That's why the Gradumet provides controlled-release as well as long release.

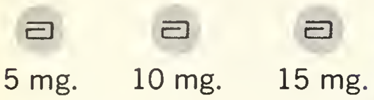
Perhaps you saw the Gradumet model demonstration which shows that the release is entirely physical. When fluid is added, the drug in the outer ends of the channels dissolves. As fluid penetrates deeper into the channels, there is a continuous release of medication. The rate of release is rigidly controlled by the size and number of channels.

choice of 5 strengths

Abbott
Anorectic
Program

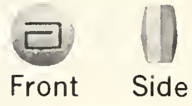
DESOXYN Gradumet

Methamphetamine Hydrochloride in Long-Release Dose Form



DESBUTAL 10 Gradumet

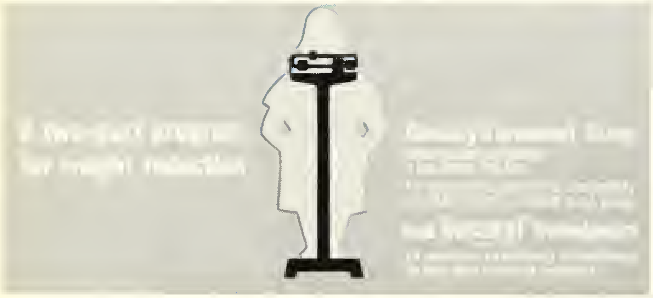
10 mg. Methamphetamine Hydrochloride,
60 mg. Pentobarbital Sodium



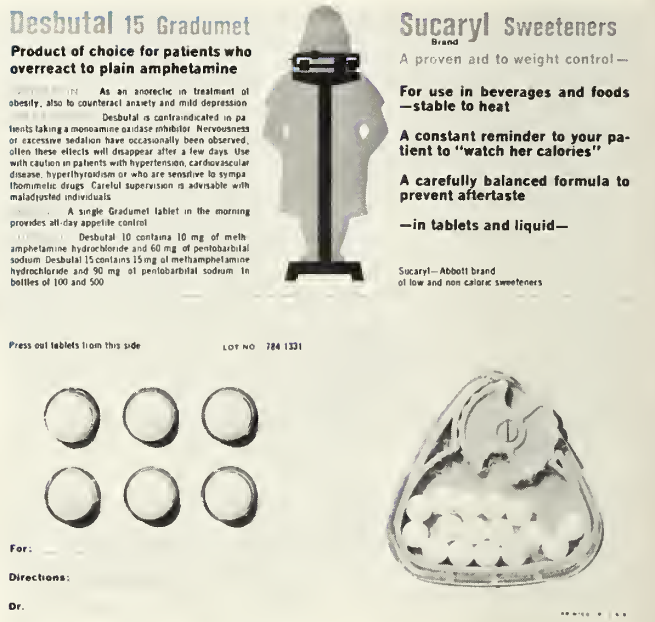
DESBUTAL 15 Gradumet

15 mg. Methamphetamine Hydrochloride,
90 mg. Pentobarbital Sodium

samples available



Each sample contains 6 tablets and a filled Sucaryl® Sweetener dispenser. For a supply, write Abbott Laboratories or ask your Abbott man.



Desbutal 15 Gradumet

Product of choice for patients who overreact to plain amphetamine

As an anorectic in treatment of obesity, also to counteract anxiety and mild depression

Desbutal is contraindicated in patients taking a monoamine oxidase inhibitor. Nervousness or excessive sedation have occasionally been observed, often these effects will disappear after a few days. Use with caution in patients with hypertension, cardiovascular disease, hyperthyroidism or who are sensitive to sympathomimetic drugs. Careful supervision is advisable with maladjusted individuals.

A single Gradumet tablet in the morning provides all-day appetite control

Desbutal 10 contains 10 mg. of methamphetamine hydrochloride and 60 mg. of pentobarbital sodium. Desbutal 15 contains 15 mg. of methamphetamine hydrochloride and 90 mg. of pentobarbital sodium. In bottles of 100 and 500

Sucaryl Sweeteners
Brand

A proven aid to weight control—

For use in beverages and foods —stable to heat

A constant reminder to your patient to "watch her calories"

A carefully balanced formula to prevent aftertaste

—in tablets and liquid—

Sucaryl—Abbott brand
of low and non caloric sweeteners

Press out tablets from this side

LOT NO 784 1331

For:

Directions:

Dr.

economy

Patients, in many cases, save enough to get five weeks of medication for the price of four, compared to other leading long-release anorectics.

CONTRAINDICATION: Desoxyn and Desbutal are contraindicated in patients taking a monoamine oxidase inhibitor.

PRECAUTIONS: Use with caution in patients with hypertension, cardiovascular disease, hyperthyroidism, old age, or those sensitive to sympathomimetic drugs or ephedrine and its derivatives. Careful supervision is advisable with maladjusted individuals.

ABBOTT

Gradumet—long-release dose form, Abbott: U.S. Pat. No. 2,987,445.
Sucaryl—Abbott brand of low and non-caloric sweeteners.

1060

'ayne Serving Now \s 101st President

C. Allen Payne, M.D., of Grand Rapids, was ıstalled at the 1966 Annual Session as the 101st resident of the Michigan State Medical Society ı Grand Rapids.

Doctor Payne is a pathologist and director of boratories at Blodgett Memorial Hospital in rand Rapids, a post he has held since 1938.

He served in 1955 as president of the Kent ounty Medical Society. Also a past president of ıe Michigan Pathological Society, he was for 10 ears a member of the Council of the MSMS. He ow serves on the Michigan State Board of Regiration in Medicine, appointed by Governor omney.

GR Wife's Painting Vins Art Show

A painting by Mrs. Leonard Rosenzweig, wife a Grand Rapids physician was judged "Best Show" at the Doctor and Wife Art Exhibit the 1966 annual meeting of the Michigan State ledical Society and its Woman's Auxiliary.

The results of judging were announced by Mrs. A. Hutchinson, Grand Rapids, chairman:

Class I – Painting: 1. Mrs. Leonard Rosenveig, Grand Rapids, 2. Mrs. Marie VandenBerg, olland, 3. Mrs. Luis Tomatis, Grand Rapids.

Class II – Painting: 1. Mrs. Robert Westerhoff, rand Rapids, 2. Douglas A. Castleman, M.D., astings.

Class III – Sculpture: 1. Mrs. Patricia Shek, ıginaw, 2. Mrs. Leonard Rosenzweig, Grand apids, 3. Andrew Hoekstra, M.D., Grand Rapids.

Class IV – Ceramics: 1. Mrs. F. A. Hutchinson, rand Rapids, 2. Robert Huebner, M.D., Hastgs, 3. Isla De Pree, M.D., Grand Rapids.

Class V – Drawing & Prints: 1. Mrs. Luis Toatis, Grand Rapids, 2. Mrs. Leonard Rosenveig, Grand Rapids.

Class VI – Three Dimensional Art: 1. Mrs. argaret Scholten, Kalamazoo, 2. Mrs. R. Jack hase, Grand Rapids.

Class VII – Photography: 1. George Bewisek, .D., Hastings, 2. Doctor Bewisek, 3. Robert E. Gunning, M.D., Grand Rapids, Honorable ention, John Wilson, M.D., Grand Rapids, 'illiam Butler, M.D., Grand Rapids.

5 Groups Cooperate To Provide Tests

Doctors, like people, get sick. They die. Sometimes they even neglect their own health. They tell people to get an annual check-up, and then neglect their own. In short, they're like most people – at times inconsistent, forgetful, in need of reminders.

That's why as part of the Annual Scientific Session for the doctors of Michigan in Grand Rapids September 27-29, the Michigan State Medical Society arranged for "M.D. Screening Examinations." In a special area of the Civic Auditorium in Grand Rapids the doctors were offered Tuberculin Testing, Chest X-Ray, Pulmonary Function Testing, EKG and Blood Pressure, Blood Testing for Sugar and Cholesterol, and a Weight Check.

The medical society hopes these tests will encourage the doctors to get their annual physical check-up.

Cooperating in this screening project were the Michigan Tuberculosis and Respiratory Disease Association, Michigan Heart Association, Michigan Diabetes Association, Michigan Thoracic Society, Michigan State Department of Public Health.

OKAY EDUCATIONAL WORK IN CRIME PREVENTION

Efforts to modify the rising crime rate are to be undertaken this coming year by the Michigan State Medical Society.

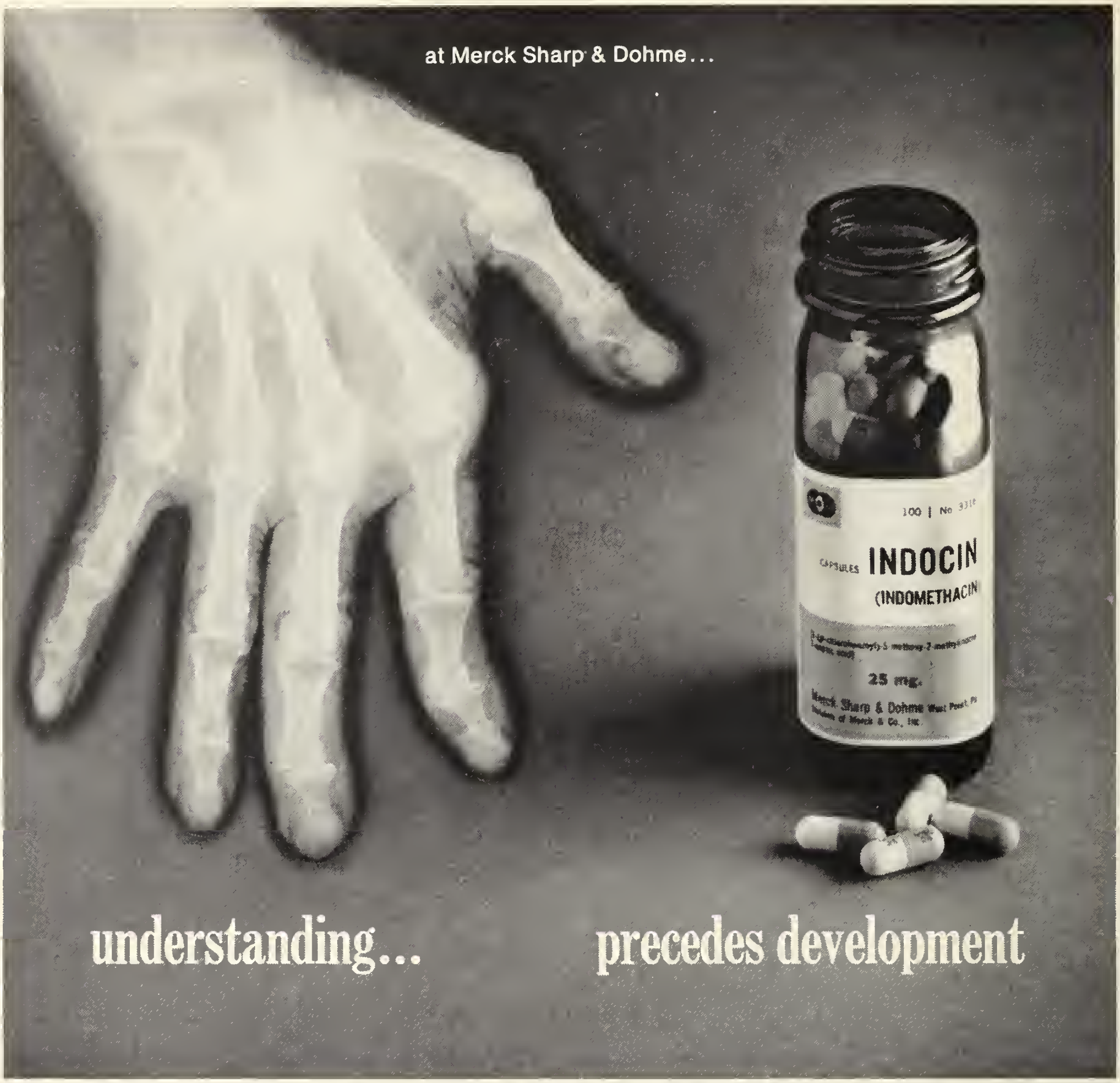
The 1966 House of Delegates authorized "a new educational program for both the physicians and the public on crime prevention."

The medical profession moved into this new area of human concern, recognizing that "the medical profession by tradition, training and practice is in a position to recognize deviations in behavior which contribute to crime."

The physicians decided that "a massive educational program for both physicians and the public could be helpful in reversing the current crime trend."

The resolution pointed out "there is an increasing frequency in crime and delinquency in the United States and the medical profession always has been concerned with any problem involving suffering and death."

(See Center Section)


at Merck Sharp & Dohme...
100 | No 3316
CAPSULES INDOCIN
(INDOMETHACIN
25 mg.
Merck Sharp & Dohme West Point, Pa
understanding...
precedes development

The synthesis of cortisone was accomplished by Merck Sharp & Dohme in 1948—the famous "Compound E" used by Dr. Philip Hench in his historic experiment at the Mayo Clinic.

But proud as we are of our role in the development of cortisone and subsequent corticosteroids, we have continued to seek a greater understanding of arthritic disorders and new drugs for their treatment.

One such drug—INDOCIN® (indomethacin), a nonsteroid, anti-inflammatory agent fundamentally different in structure and activity from other drugs in use—was recently made available for the treatment of arthritic conditions. It opens new possibilities for the long-term management of arthritis and inflammatory disease.

MERCK SHARP & DOHME | **where today's theory is tomorrow's therapy**
Division of Merck & Co., INC., West Point, Pa

INDOCIN®

INDOMETHACIN

Indications: Chronic and acute rheumatoid arthritis, rheumatoid (ankylosing) spondylitis, degenerative joint disease (osteoarthritis) of the hip, and gout. **Contraindications:** Active peptic ulcer, gastritis, regional enteritis, or ulcerative colitis. Safety in pregnancy has not been established. Not recommended for pediatric age groups. **Warning:** Patients who experience dizziness, lightheadedness, or feelings of detachment on INDOCIN should be cautioned against operating motor vehicles, machinery, climbing ladders, etc. Use cautiously in patients with psychiatric disturbances, epilepsy, or parkinsonism. **Precautions and Adverse Reactions:** Most commonly, headache, dizziness, lightheadedness, G.I. disturbances. The C.N.S. effects are often transient and frequently disappear with continued treatment or reduced dosage. The severity of these effects may occasionally require cessation of therapy. G.I. effects may be minimized by giving the drug with food or with antacids or immediately after meals. Ulceration of the stomach, duodenum, or small intestine has been reported and, in a few instances, severe bleeding with perforation and death. Gastrointestinal bleeding with no obvious ulcer formation has also been noted; INDOCIN should be discontinued if G.I. bleeding occurs. As a result of G.I. bleeding, some patients may manifest anemia, and for this reason periodic hemoglobin determinations are recommended. Rare reports of effects not definitely known to be attributable to INDOCIN include bleeding from the sigmoid colon (either from a diverticulum or without a known previous pathologic condition), perforation of preexisting sigmoid lesions (diverticulum, carcinoma), and hematuria. In other rare cases, a diagnosis of gastritis has been made while the drug was being given. One patient developed ulcerative colitis, and another, regional ileitis, while receiving INDOCIN; when the drug was given to patients with preexisting ulcerative colitis, there was an increase in abdominal pain. Infrequently observed side effects may include drowsiness, tinnitus, mental confusion, depression and other psychic disturbances, blurred vision, stomatitis, pruritus, edema, and hypersensitivity reactions. Slight BUN elevation, usually transient, has been seen in some patients, although the preponderance of evidence indicates that INDOCIN does not adversely affect renal function, even in patients with preexisting renal disease. Nevertheless, renal function should be checked periodically in patients on long-term therapy. Leukopenia has been seen in a few patients. Transient elevations in alkaline phosphatase, cephalin-cholesterol flocculation, and thymol turbidity tests have been observed in some patients and, rarely, elevations of SGOT values; the relationship of these changes to the drug, if any, has not been established. As with any new drug, patients should be followed carefully to detect unusual manifestations of drug sensitivity. Before prescribing or administering, read product circular with package or available on request.

Governor Romney Proclaims Week

Governor Romney proclaimed the week of October 16 - 22, 1966, as Community Health Week in Michigan to aid the special project of the Michigan State Medical Society, Michigan Health Council and Michigan Association of the Professions.

The proclamation reads:

"Health being the most priceless possession of every man, woman and child, it is essential that a high level of health be maintained to assure the safety, growth and progress of our state.

"It is a refreshing fact that Americans today are living longer, healthier lives than ever before in history because of the enormous advances made in medicine and health care services during our lifetime. Physicians, medical scientists, and dedicated men and women in the many fields allied to medicine have teamed up to conquer polio, smallpox, diphtheria and other dreaded preventable diseases which once took a heavy toll of life.

"And in addition, medicine's endless search for new discoveries and methods to make life free from serious disease or crippling injury and ways to rehabilitate the ill and injured are reaching toward even greater heights.

Michigan citizens are blessed with many excellent health services and facilities which have resulted from intensive state and community efforts. We strive to encourage our communities to have the vision, the essential teamwork and planning necessary to meet and cope with tomorrow's health needs so that the highest level of health protection and total health care services will be available to all.

"Therefore, I, George Romney, Governor of the State of Michigan, do hereby proclaim the week of October 16 - 22, 1966, as Community Health Week in Michigan, and call upon medical societies, allied health professions, public and private health organizations and agencies, civic organizations and public schools to join in its observance to demonstrate to the people of this state the many health services and facilities that enrich their lives, and to encourage community planning to meet our health needs of the future."

By Patronizing Our Advertisers

You Help Support

MICHIGAN MEDICINE

Headlines Tell Story Of Annual Session Action, Speakers

News and feature articles about MSMS, Michigan physicians and medical subjects appeared in papers across the state every day during the 101st Annual Session in Grand Rapids.

The MSMS News Room was a busy place, with the staff giving assistance to science writers, religious editors, news reporters, wire service bureau chiefs and women's editors. And there was equal activity with Grand Rapids area radio and television stations. The stations carried news items and interviews, taped programs for future use, and added excitement to various events with their TV news cameras.

A sampling of the newspaper headlines provides a review of the Annual Session:

* * *

"2,500 MD'S PLAN STATE CONFERENCE"

* * *

"M.D. SEEKS IDENTICAL COURSES IN MEDICAL, OSTEOPATHIC SCHOOLS"

* * *

"DOCTORS URGE 4-YEAR MED SCHOOL AT MSU"

* * *

"STATE'S DOCTORS OPEN CONVENTION"

* * *

"HALF-CENTURY AWARDS GO TO 48 DOCTORS"

* * *

"DOCTORS STUDY PARAMEDICS TO MEET PHYSICIAN SHORTAGE"

* * *

"DOCTORS GET PHYSICALS"

* * *

"DOCTOR BRADLEY HARRIS ELECTED NEW PRESIDENT"

* * *

"TWO WOMEN DELEGATES ATTEND STATE MEDICAL CONFERENCE"

* * *

"MEDICAL GROUP HONORS LATE DR. W. A. HYLAND"

* * *

"HEY, LOOK ME OVER—DOCTORS TAKE OWN MEDICINE, GET PHYSICAL EXAMS"

OFFER MEDICARE HANDBOOK

A doctor's emergency handbook on Medicare, entitled, "How to Practice Successfully Under Medicare," has been published by Prentice-Hall and is available for interested physicians.

The 40-page booklet may be obtained for $1.50 from MSMS, 120 W. Saginaw, East Lansing.

* * *

"MRS. ROSENZWEIG WINS AWARD IN DOCTORS, WIVES ART SHOW"

* * *

"DOCTOR PAYNE HEADS STATE DOCTORS—SETS HIGH GOALS"

* * *

"PREPARE DYING PATIENT FOR DEATH MD'S TOLD"

* * *

"DOCTORS FACE VAST CHANGES, URGED TO BECOME INVOLVED"

* * *

"WORLD OF CHANGING MORALS DRAWS DOCTOR'S ATTENTION; BIRTH CONTROL ABORTION EYED"

* * *

"BAY CITY WOMAN NAMED MEDICAL ASSISTANT OF YEAR"

* * *

"DOCTORS PROPOSE IDENTICAL COURSES IN MEDICAL, OSTEOPATHIC SCHOOLS"

* * *

"PANEL ASKS CHANGES IN SEX VIEWS"

* * *

"PHYSICIANS STUDY USE OF ASSISTANTS"

* * *

"SUGAR PILLS FOUND EFFECTIVE IN COOLING OFF SOME NEUROTICS"

* * *

"EXPERT ANALYZES MARRIAGES TO FIND WHY 40 PER CENT FAIL"

* * *

"RECTOR URGES TEEN BIRTH CONTROL AID"

* * *

NEEDED: A DEFINITION OF DEATH

Are You Aware . . . .

That the Group Disability Insurance Plan sponsored by the Michigan State Medical Society can meet every test of quality that may be applied?

CHECK THESE IMPORTANT POINTS!

- **Renewal Guarantees.** The renewal of your protection is guaranteed even if the master policy should be terminated or if you should leave Michigan. This provision, of course, is contingent upon your remaining in active practice.
- **Long Term Protection.** Lifetime accident and illness to age 65. Shorter periods also available.
- **Favorable Definition of Total Disability.** Inability to perform the duties of your occupation for the first five years; thereafter, inability to engage in any occupation for which you are qualified by training or experience.
- **Low Cost.** Compare the cost of the MSMS Plan with any other of comparable quality. You will be pleasantly surprised. Premiums are low because of the applications of group rates and the combined purchasing of so many members of MSMS.

Examples of Annual Premiums:

Attained Age	Monthly Indemnity	Lifetime Accident 5 Years Sickness	Lifetime Accident Sickness to Age 65
Thru 33	$500	$126.90	$176.90
34-49	500	151.70	201.70
50-65	500	214.60	264.60

Write for premiums at other ages and other amounts of monthly indemnity.

PROVIDENT LIFE AND ACCIDENT INSURANCE COMPANY

BEN P. STRATTON AGENCY, INC.
Administrators
P.O. BOX 547
LANSING, MICHIGAN 48903

Book Review

"Cardiac Evaluation in Normal Infants" by Robert F. Zeigler, M.D., Physician-in-charge, Division of Pediatrics, Cardiology, Henry Ford Hospital, Detroit; Published by The C. V. Mosby Company, St. Louis. (Reviewed by Philip Howard, M.D., Detroit)

Dr. Zeigler has written a practical manual for pediatricians in evaluating heart disease in infants. Many basic problems of infancy are reviewed clearly and in few words. Among the subjects reviewed are the problem and evaluation of heart murmurs. This is of immediate use to every pediatrician.

The author says, "When a murmur is heard at birth, the chances are one to twelve that the child has congenital heart disease; if the murmur is again heard at six months, the chances increase to one in three, and if the murmur persists to the age of twelve months, the probability that congenital heart disease is present exists in three out of five instances. On the other hand, when no murmur is heard at birth, but a murmur appearing at six months persists until twelve months, the odds in favor of congenital heart disease are about one in seven; and when a murmur is first heard at twelve months of age, the probability of congenital heart disease is one in fifty."

Detailed pertinent information of this order is given for evaluation of cyanosis, evaluation of cardiac rate and rhythm, or heart size, of heart failure, of the infant heart in respiratory distress, and of reversible heart disease and prediction of normalcy.

The book also carries a review of fetal circulation, and immediate changes at birth, with summary of neonatal and infant circulatory physiology.

The final chapter outlines the condition of the heart in such non-cardiac diseases, central nervous defects, arteriovenous fistulae, anemia, and agenesis of the lung. This book enlightens and makes comprehensible a clinical problem of great magnitude. It is of immediate useful value to the pediatrician, and other scholars exploring these problems of early heart disease.

"May there never develop in me the notion that my education is complete but give me the strength and leisure and zeal continually to enlarge my knowledge."

MAIMONIDES

STATEMENT OF OWNERSHIP, MANAGEMENT AND CIRCULATION

(Act of October 23, 1962; Section 4369, Title 39, United States Code)

1—Date of filing: October 7, 1966. 2—Title of Publication: Michigan Medicine. 3—Frequency o issue, Monthly. 4—Location of known office of publication, 200 N. Cedar St., Lansing, (Inghan County) Michigan. 5—Location of the headquarters or general business offices of the publishers 120 West Saginaw Street, East Lansing, Michigan (Ingham County) 48824. 6—Names and addresses of publisher, editor, and managing editor, Publisher, Michigan State Medical Society, 12 W. Saginaw St., East Lansing, Michigan; Scientific Editor, George H. Lawrey, M.D., 540 Rock Cree Drive, Ann Arbor, Michigan 48104; Managing Editor, Herbert A. Auer, 120 W. Saginaw Street, Eas Lansing, Michigan.

7—Owner—

Michigan State Medical Society, 120 West Saginaw St., East Lansing, Michigan

8—Known bondholders, mortgagees, and other security holders owning or holding 1 per cent o more of total amount of bonds, mortgages or other securities. None.

		Average No. Copies Each Issue During Preceding 12 Months	Single Issue Nearest To Filing Dat
A.	Total No. Copies Printed	7,625	7,600
B.	Paid Circulation 2. Mail Subscriptions	6,695	6,688
C.	Total Paid Circulation	6,695	6,688
D.	Free Distribution (including samples) by Mail, Carrier Delivery, or by Other Means	560	544
E.	Total Distribution. (Sum of lines C and D)	7,255	7,232
F.	Office use, Unaccounted, Spoilage after Printing	370	368
G.	Total (Sum of E and F)	7,625	7,600

I certify that the statements made by me above are correct and complete. Wm. T. Coulter, for Publisher

following infection

B and C vitamins are therapy: STRESSCAPS B and C vitamins in therapeutic amounts...help the body mobilize defenses during convalescence...aid response to primary therapy. The patient with a severe infection, and many others undergoing physiologic stress, may benefit from STRESSCAPS capsules.

Stresscaps®
Stress Formula Vitamins Lederle

FOR PROFESSIONAL
RECOMMENDATION ONLY

Each capsule contains:

Vitamin B_1 (as Thiamine Mononitrate)	10 mg
Vitamin B_2 (Riboflavin)	10 mg
Vitamin B_6 (Pyridoxine HCl)	2 mg
Vitamin B_{12} Crystalline	4 mcgm
Vitamin C (Ascorbic Acid)	300 mg
Niacinamide	100 mg
Calcium Pantothenate	20 mg

Recommended intake: Adults, 1 capsule daily, for the treatment of vitamin deficiencies. Supplied in decorative "reminder" jars of 30 and 100; bottles of 500.

LEDERLE LABORATORIES, A Division of American Cyanamid Company, Pearl River, New York
Lederle
626-6—3612

STRESSCAPS

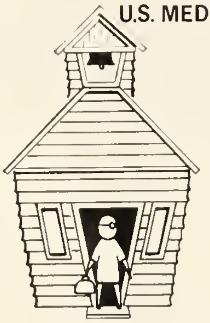
STUDY OF ECONOMICS URGED IN SCHOOLS

The study of our democracy and our economy belong on every school curriculum, no matter how crowded, the executive director of the Michigan Council of Economic Education said recently.

Theral T. Herrick, professor of economic education in the U-M Graduate School of Business Administration, pointed out that "democracy means the basic plan for living and working together, whereas our economy means the basic plan for meeting our materialistic wants and needs."

Herrick said that there are many reasons for including economic education in the school curriculum.

MEDICAL SCHOOL CONSTRUCTION BOOM



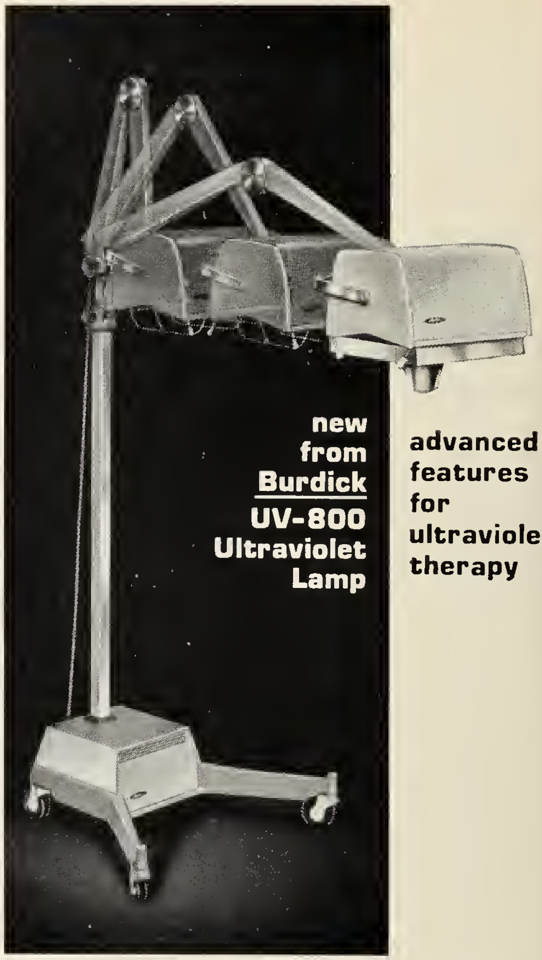
YEAR	U.S. MEDICAL SCHOOLS	GRADUATES
1930	77	4,735
1965	88	7,409
1970	101	8,000
1975	107-113	10,000

HODGKIN'S DISEASE AND LYMPHOSARCOMA

The cooperation of physicians is requested in a study of Hodgkin's disease and lymphosarcoma being conducted by the National Cancer Institute at the Clinical Center, National Institutes of Health, Bethesda, Maryland.

Particularly desired are patients who have had no previous treatment or minimal prior treatment. All clinical stages of biopsy-proven disease are acceptable. The major purpose of the study is to determine the curative potential of intensive radiotherapy in localized cases and to evaluate combination chemotherapy and X-irradiation in patients with generalized involvement.

Physicians interested in having their patients considered for the study may phone or write to: Paul P. Carbone, M.D., The Clinical Center, National Institutes of Health, Building 10, Room 12-N-228, Bethesda, Maryland 20014; Telephone: 656-4000, Ext. 64251. — ANNOUNCEMENT, Clinical Center, NIH, April 1966.



advanced features for ultraviolet therapy

Burdick's unique **Equipoise Arm** gives you "full-reach" over the treatment table, and easy positioning for any treatment situation. Reflector unit floats into position with finger-tip ease — and holds. Reflector unit rotates 360° on its own axis, allowing the operator to select the correct angle and position for any treatment. New **"Localizer"** with 2-inch cone (supplied as standard equipment) permits uniform focusing of radiation to small treatment areas. The **Localizer** may be quickly attached to the reflector hood, and easily removed.

Telescoping vertical column permits storage of the UV-800 in a compact space. Shutters mounted inside the reflector effectively shield stray radiation when the lamp is not in use. Wide-stance base and large, easy-rolling casters give the UV-800 easy mobility and good stability during treatments. Efficient, high-intensity radiation — full mercury arc spectrum — short treatment time — long tube life. Now is the time to modernize your ultraviolet equipment. Consider all the features of the stylish new UV-800, then see your Burdick dealer or write The Burdick Corporation, Milton, Wisconsin 53563, about trading-up!

Medical Arts Supply Co.

311 State Street
Grand Rapids, Michigan

"Yes, Doctor, the pain is gone."

■ Despite introduction of synthetic substitutes, efficacy of 'Empirin' Compound with Codeine remains unchallenged.

'Empirin'® Compound with Codeine Phosphate gr. ½ No. 3
Each tablet contains: Codeine Phosphate gr. ½ (Warning—May be habit forming), Phenacetin gr. 2½, Aspirin gr. 3½, Caffeine gr. ½.

Keeps the Promise of Pain Relief

BURROUGHS WELLCOME & CO. (U.S.A.) INC., Tuckahoe, N.Y.

block
end
runs

98
98
LOMOTIL

LOMOTIL®

tablets/liquid

Each tablet and each 5 cc. of liquid contains:
diphenoxylate hydrochloride..... 2.5 mg.
(Warning: May be habit forming)
atropine sulfate ....0.025 mg.

tackles the problem of diarrhea directly

Effectiveness—Physiologic evidence indicates that Lomotil acts directly on the smooth muscle of the bowel to lower motility and control diarrhea. This action is unsurpassed in promptness and efficiency.

Convenience—Lomotil is available as small, easily carried, virtually tasteless tablets and as a pleasant, fruit-flavored liquid.

Versatility—The therapeutic efficiency, safety and convenience of Lomotil may be used to advantage alone or adjunctively in diarrhea associated with:

• Functional hypermotility • Acute infections • Malabsorption syndrome • Drug therapy • Gastroenteritis and colitis • Irritable bowel • Regional enteritis • Ileostomy • Ulcerative colitis • Food poisoning

For correct therapeutic effect
Rx correct therapeutic dosage

Dosage: The recommended initial daily dosages, given in divided doses until diarrhea is controlled, are:

Children: Total Daily Dosage

3-6 mo. . . ½ tsp.* t.i.d. (3 mg.)
6-12 mo. . ½ tsp. q.i.d. (4 mg.)
1-2 yr. . . . ½ tsp. 5 times daily (5 mg.)
2-5 yr. . . . 1 tsp. t.i.d. (6 mg.)
5-8 yr. . . . 1 tsp. q.i.d. (8 mg.)
8-12 yr. . . 1 tsp. 5 times daily (10 mg.)

Adults: 2 tsp. 5 times daily (20 mg.)
(or 2 tablets q.i.d.)

*Based on 4 cc. per teaspoonful.

Maintenance dosage may be as low as one-fourth the initial daily dosage.

Precautions: Lomotil, brand of diphenoxylate hydrochloride with atropine sulfate, is a Federally exempt narcotic preparation of very low addictive potential. Lomotil should be kept out of reach of children since accidental overdosage may cause severe respiratory depression. Recommended dosages should not be exceeded. Lomotil should be used with caution in patients with impaired liver function and in patients taking addicting drugs or barbiturates. The subtherapeutic amount of atropine is added to discourage deliberate overdosage.

Side Effects: Side effects are relatively uncommon but among those reported are gastrointestinal irritation, sedation, dizziness, cutaneous manifestations, restlessness, insomnia, numbness of extremities, headache, blurring of vision, swelling of the gums, euphoria, depression and general malaise.

SEARLE *Research in the Service of Medicine*

when congestion is complicated by sulfa-susceptible bacterial invaders in the upper respiratory tract...

re-enforce your decongestant therapy

prescribe economical **Trisulfaminic®**

Each tablet contains: Triaminic® 25 mg. (phenylpropanolamine hydrochloride 12.5 mg., pheniramine maleate 6.25 mg., pyrilamine maleate 6.25 mg.); Trisulfapyrimidines, U.S.P. 0.5 Gm. (sulfadiazine 0.167 Gm., sulfamerazine 0.167 Gm., sulfamethazine 0.167 Gm.)

PHARMACOLOGY: Triaminic decongests and promotes drainage of nasal and paranasal passages, and prevents any further histamine-induced damage; the triple sulfonamides inhibit susceptible bacterial invaders. INDICATIONS: For congestion and infection of the upper respiratory tract caused by sulfa-susceptible organisms. DOSAGE: Adults: 2 to 4 tablets initially, followed by 2 tablets every 6 hours. Medication should be continued until patient has been afebrile for 3 days. ADVANTAGES: The advantages of Trisulfaminic in upper respiratory infections are: freedom from narcotics or alcohol; therapeutic reliability; safety; economy; ease of administration; freedom from potential sensitization to broad-spectrum antibiotics which may be reserved for lower respiratory or other infections caused by susceptible organisms. CONTRAINDICATIONS: Contraindicated in sulfonamide and antihistamine sensitivity, impaired renal function, pregnancy approaching term, and in premature infants and newborn infants during the first month of life. Do not use in patients with glaucoma, prostatic hypertrophy, stenosing peptic ulcer, pyloroduodenal or bladder neck obstruction. WARNING: Use only after careful evaluation in patients with liver or renal damage, urinary obstruction, or blood dyscrasias. Deaths have been reported from hypersensitivity reactions with administration of sulfonamides. In intermittent or prolonged therapy, blood counts and liver and kidney function tests should be performed periodically. Sulfonamide therapy may potentiate the hypoglycemic action of sulfonylureas. PRECAUTIONS: Use with caution in patients with histories of significant allergy or asthma. Assure an adequate fluid intake. Because the antihistamines may cause drowsiness of varying degree, warn patients about activities requiring alertness such as driving a car or operating dangerous machinery. Use with caution in the presence of hypertension, hyperthyroidism, cardiovascular disease and diabetes. ADVERSE REACTIONS: As in all sulfonamide therapy, the following reactions may occur: headache, nausea, vomiting, diarrhea, icterus, hepatitis, pancreatitis, urticaria, rash, fever, cyanosis, hematuria, crystalluria, proteinuria, blood dyscrasias, petechiae, purpura, neuropathy and injection of the conjunctiva and sclera. If one or more of these reactions occur, the drug should be discontinued. With antihistaminic therapy there have been reports of sedation varying from mild drowsiness to deep sleep, dizziness, lassitude, inability to concentrate, fatigue, incoordination, tinnitus, blurred vision, diplopia, euphoria, nervousness, insomnia, tremors, palpitation, hypotension, headache, chest tightness, urinary frequency, dysuria, tingling of the hands, dryness of the mouth, throat, and nose, gastrointestinal disturbances such as epigastric distress, anorexia, nausea, vomiting, constipation and diarrhea and very rarely, leukopenia and agranulocytosis. Adverse reactions reported with the use of sympathomimetic amines include anxiety, tension, restlessness, nervousness, tremor, weakness, insomnia, headache, palpitation, tachycardia, angina, elevation of blood pressure, sweating, mydriasis, anorexia, nausea, vomiting, dizziness, constipation, and dysuria due to vesicle sphincter spasm. PACKAGE INFORMATION: Trisulfaminic Tablets: Supplied in bottles of 100 tablets. CAUTION: Federal law prohibits dispensing without prescription.

DORSEY LABORATORIES • *a division of The Wander Company* • **LINCOLN, NEBRASKA**

In Memoriam

Arthur K. Bennett, MD, Marquette

Arthur K. Bennett, MD, 85, Marquette physiian for nearly 40 years, died September 13 at St. Luke's Hospital.

Born in Watkins Glen, N.Y., Doctor Bennett eceived his degree in medicine in 1904 from the University of Michigan School of Medicine. He hen studied tropical medicine at the University f Liverpool, following which he entered the medcal missionary field and served for 12 years in Basra, Arabia. Before coming to Marquette, Docor Bennett took postgraduate work at Harvard University.

He served as health officer in Marquette from 917-18 before entering the private practice of medicine. Doctor Bennett was affiliated with St. Luke's and St. Mary's hospitals, where he served s chief of staff of the latter. His medical memerships included the American College of Sureons.

Doctor Bennett was a Life Member of the Michgan State Medical Society.

Among the survivors is a son, Matthew C. Benett, MD, also a physician in Marquette.

Charles S. Kennedy, MD, Detroit

Charles S. Kennedy, MD, 78, former University f Michigan regent and a distinguished surgeon for more than 50 years, died September 25 at his resience.

A Detroit native, Doctor Kennedy was graduated rom the University of Michigan School of Medcine in 1913. He immediately joined the staff of Grace Hospital, Detroit, where he was affiliated uring his entire career, serving as vice chief of aff from 1938 to 1948, and as chief of staff from 949 to 1952.

He had been a member of the medical faculty f Wayne State University since 1913 and was amed emeritus professor of surgery in 1945. In 962 his Alma Mater awarded him an honorary egree of doctor of laws.

Doctor Kennedy was awarded a Certificate of ommendation by the Michigan State Medical ociety in 1962 citing his "enviable record as a eacher and surgeon."

A charter member of the Detroit College of Sureons and former governor of the American Colege of Surgeons, Doctor Kennedy's medical memberships included the Detroit Academy of Medicine, Central Surgical Association, American Board of Surgery, Frederick Coller Society, Alpha Omega Alpha and Phi Rho Sigma.

He was consulting surgeon at Detroit Receiving, Detroit TB Sanitarium, The Haven, and associate surgeon at Jennings Hospital, all of Detroit.

Doctor Kennedy served in the Army Medical Corps in World War I.

A Life Member of the Michigan State Medical Society, Doctor Kennedy received its 50 Year Award in 1963.

John G. Mateer, MD, Detroit

John G. Mateer, MD, 76, former physician-in-chief at Henry Ford Hospital, died September 2 at that hospital where he served for 46 years.

A 1918 graduate of Johns Hopkins, Doctor Mateer served his internship and residency there from 1918 to 1920, following which he joined the staff at Ford Hospital as physician-in-charge of the division of gastroenterology. In 1952 Doctor Mateer was named physician-in-chief, a post he held until 1963 since which time he had been a senior consultant.

A Past President of the American Gastroenterological Association, Doctor Mateer's other memberships included the Central Society for Clinical Research and the American College of Physicians.

Doctor Mateer was a Life Member of the Michigan State Medical Society.

Orland W. Mitton, MD, Retired

Orland W. Mitton, MD, retired physician, died September 24, 1966, in Albuquerque, New Mexico, where he had made his home since 1959. He was 76.

A native of Blenheim, Ontario, Doctor Mitton received his medical degree from the Medical Faculty of the University of Western Ontario, London, Ontario, in 1916. He engaged in the general practice of medicine for ten years. He then took a residency in eye, ear, nose and throat at the Polyclinic Hospital, New York City from 1927 to 1929. Following this he practiced in Detroit, East Tawas and Battle Creek, until his retirement.

Doctor Mitton was a retired member of the Michigan State Medical Society.

Jose Ribeilima, MD, Grand Rapids

Jose Ribeilima, MD, Grand Rapids, died September 16. He was 35 years old.

A native of Brazil, Doctor Ribeilima was graduated from the National School of Medicine, Brazil University in 1958. He served his internship at New Britain General Hospital and Highland Park General Hospital and did postgraduate work at Detroit Receiving Hospital.

Doctor Ribeilima was formerly Director of the Cardiovascular Research Department of Blodgett Memorial Hospital in Grand Rapids.

Charles E. Snyder, MD, Swartz Creek

Charles E. Snyder, MD, Swartz Creek physician, died August 28 at his home. He was 61.

Doctor Snyder received his MD degree from the University of Michigan School of Medicine and served his internship at Grace Hospital, Detroit. In 1931 Doctor Snyder opened his office in Swartz Creek, where he remained in active practice until his death.

During World War II Doctor Snyder served as a major, having spent 24 months in the European Theatre. He was decorated with three Battle Stars and one Bronze Star.

Russell A. Springer, MD, Sturgis

Russell A. Springer, MD, Past President of the St. Joseph County Medical Society, died August 14. He was 71.

Doctor Springer received his degree in medicine from the University of Michigan School of Medicine in 1921. A former delegate to the MSMS House of Delegates, Doctor Springer was also past secretary of the St. Joseph County Medical Society.

During World War I Doctor Springer served in the medical corps and served on Civil Defense during World War II, and was on the Advisory Committee to Selective Service.

Doctor Springer was a retired member of the Michigan State Medical Society.

Clarence E. Toshach, MD, Saginaw

Clarence E. Toshach, MD, Past President of the Saginaw County Medical Society, died September 11 at Massachusetts General Hospital, Boston. He was 71.

Doctor Toshach was born in New York City and completed his medical education at New York University's Bellevue Hospital Medical College in 1917. Following his residency at Bellevue, he went to Saginaw as city health officer in 1921-22. Doctor Toshach helped found the obstetrics and gynecology department at Saginaw General Hospital and served as chief for nearly 35 years and he started Saginaw General's prenatal clinic. Doctor Toshach was consultant at St. Mary's, St. Luke's and Veterans Administration Hospitals of Saginaw and Gratiot Community Hospital at Alma.

A former President of the American College of Obstetricians and Gynecologists and the first President of the Saginaw Surgical Society, Doctor Toshach was a Diplomate of the American Board of Obstetrics and Gynecology, a Fellow and Life Member of the American College of Surgeons, fellow of the Central Association of Obstetricians and Gynecologists and the American Society for the Study of Sterility. In 1965 Doctor Toshach received the Friend of Nursing Award from Saginaw General Hospital.

Active in medical affairs, Doctor Toshach served as Chairman of the MSMS Section of Obstetrics and Gynecology, Chairman of the Maternal Health Committee, MSMS, and as secretary to the Saginaw County Medical Society. At the time of his death he was a member of the MSMS Maternal Health Committee.

During World War I Doctor Toshach served in France as a first lieutenant.

Doctor Toshach was a Life Member of the Michigan State Medical Society.

Charles N. Weller, MD, Detroit

Charles N. Weller, MD, 71, former chief of surgery at Children's Hospital, Detroit, died September 19 at Paul Oliver Memorial Hospital, Frankfort.

Doctor Weller received his medical degree from the University of Michigan School of Medicine in 1920, and retired from active medical practice in 1960. He was affiliated with Harper and Children's Hospitals, Detroit, having joined the staff of the latter in 1926. Doctor Weller received an award from the American Medical Association for research in the treatment of burns. His medical memberships included the American College of Surgeons, the Central Surgical Association and the Detroit Academy of Surgery. Doctor Weller was a member of Alpha Omega Alpha and Phi Beta Pi medical fraternities.

Doctor Weller was a retired member of the Michigan State Medical Society.

(Continued on Page 940)

SQUIBB NOTES ON THERAPY

"'Tranquilizer' is not a good word"[1]

THIS classification is psychologically too seductive, pharmacologically too unspecific, and in terms of results not infrequently untrue."[2]

What is a tranquilizer? According to the 24th Edition of Dorland's Medical Dictionary[3] a tranquilizer is "an agent which acts on the emotional state, quieting or calming the patient without affecting clarity of consciousness."

Defining a drug by its effects, however, can be misleading. The same effects by which the dictionary defines a tranquilizer have sometimes been seen after administration of a sedative — or, for that matter, a placebo.

Ambiguous though the term may be, it appears to be here to stay. The 1966 edition of the Physicians' Desk Reference[4] lists 42 tranquilizers indicated for treatment of anxiety and apprehensive states.

'Tranquilizers' have differences in action, differences in effect

Although all tranquilizers are intended to calm anxious patients there *are* differences in their actions — and in their effects. They have been divided into three categories — the rauwolfia group, the 'minor' tranquilizers, and the phenothiazines.[5]

Although the tranquilizing effect of rauwolfia has been known for centuries, its use as an antipsychotic agent in current practice has diminished.[5]

A 'minor' tranquilizer is often prescribed to achieve more than one effect. Thus, besides being tranquilizers some of these compounds may be muscle relaxants, antihistaminics with some calming action, anticholinergic sedatives, or antispasmodics.[5]

The phenothiazines are considered 'major' tranquilizers because they alter psychotic behavior.[1] This classification may have done them more harm than good because it implies that the phenothiazines should be reserved for the more severely disturbed. This is not necessarily true.

The phenothiazines — and the problem of sedation

One of the problems of prescribing phenothiazines for ambulatory patients has been the fear that excessive sedation will impair the patient's ability to function. This, however, is less of a problem with some of the phenothiazines.

"Clinically they may be differentiated primarily in terms of their potency and the extent of their sedative effect, which appear to be inversely proportional. That is, the least potent, the one which is used in highest dosage, chlorpromazine, is the most sedative, while the reverse holds true for fluphenazine."[6]

In a recent report on various studies conducted over several years evaluating 360 patients treated for anxiety and stress with seven phenothiazines, this inverse relationship of potency to sedation was confirmed.[7] Also under consideration was the degree to which the particular phenothiazines neutralized anxiety (the angolytic index). Interestingly enough there was, again, an inverse relationship. The most sedative of the phenothiazines appeared to be the least active in neutralizing anxiety. Fluphenazine, one of the least sedative, on the other hand, was found to be most effective in relieving anxiety.[7]

RELATIVE SEDATIVE AND ANGOLYTIC INOICES OF PRINCIPAL PHENOTHIAZINES*

DRUG	SEDATIVE INDEX	ANGOLYTIC INDEX	BASED ON STANDARD DOSE OF
Chlorpromazine	100	15	25 mgs.
Triflupromazine	100	15	25 mgs.
Thioridazine	90	17	25 mgs.
Perphenazine	15	25	4 mgs.
Carphenazine	25	25	25 mgs.
Trifluoperazine	3.3	95	2.0 mgs.
Fluphenazine	3.5	100	2.5 mgs.

*adapted from Sainz[7]

Prolixin is therapeutically effective without excessive sedation

When used as a 'tranquilizer' in general medical practice, in many patients Prolixin (Squibb Fluphenazine Hydrochloride) suppresses anxiety, but not normal activity. These two features are of particular importance to patients who must be able to live and work without their normal daily activities being restricted.

Because of its longer duration of action, Prolixin, in doses of as little as one to three milligrams in adults, generally taken once a day, is effective in maintaining many patients free of their symptoms of anxiety and tension.

Contraindications: Do not use with high doses of hypnotics or in patients with subcortical brain damage. Use with caution in patients with a history of convulsive disorders. Severe reactions may occur in patients with idiosyncrasy to other centrally-acting drugs, and severe hypotension may occur in patients with special medical disorders, e.g. mitral insufficiency and pheochromocytoma.

Precautions: Effects of atropine, anesthetics and C.N.S. depressants may be potentiated. Hypotension may occur in patients undergoing surgery. Do not use epinephrine for treatment of the hypotensive reactions which may appear in patients on phenothiazine therapy.

Side Effects: Extrapyramidal reactions, allergic skin reactions, the possibility of anaphylaxis, drowsiness, visual blurring, dizziness, insomnia, nausea, anorexia, salivation, edema, perspiration, dry mouth, abnormal lactation, polyuria, hypotension, and jaundice and biliary stasis may occur. Routine blood counts are recommended to determine possible blood dyscrasias; if symptoms of upper respiratory infection occur, discontinue drug and institute appropriate therapy.

Available: 1 mg. tablets. Bottles of 50 and 500.

For full prescribing information, see package insert

References: 1. Simpson, G.M.: Postgrad. Med. 39:557, 1966. 2. Freyhan, F.A.: Am. J. Psychiat. 115:577, 1959. 3. Dorland's Illustrated Medical Dictionary, ed. 24, Philadelphia, W. B. Saunders Co., 1965, p. 1603. 4. Physicians' Desk Reference, 1966, Oradell, N.J., 1965, p. 310. 5. Cohen, S.: Northwest Med.: 65:197, 1966. 6. Detre, T., and Jarecki, H.: Connecticut Med. 25:553, 1961. 7. Sainz, A.: Psychosomatics 5:167, 1964.

PROLIXIN®

SQUIBB FLUPHENAZINE HYDROCHLORIDE

SQUIBB

'The Priceless Ingredient' of every product is the honor and integrity of its maker

John N. Wenger, MD, Coopersville

John N. Wenger, MD, long-time physician of Coopersville, died September 25 at Butterworth Hospital in Grand Rapids. He was 82 years old.

A graduate of the University of Michigan School of Medicine in 1912, Doctor Wenger was engaged in the general practice of medicine in Coopersville. Doctor Wenger was a staff member more than 50 years at Butterworth and Blodgett Memorial Hospitals of Grand Rapids.

Doctor Wenger was a Life Member of the Michigan State Medical Society, and in 1962 received its 50 Year Award.

Start Your V.D. Campaign

The AMA has all the materials you need to start an information-packed campaign against syphilis and gonorrhea — the highly contagious diseases that threaten epidemic proportion in our country. You can perform a real public service by displaying and distributing the authoritative, factual and interesting pamphlets and Timely Tip Leaflet and the reminder poster in schools, libraries and public buildings in your community.

The pamphlets:

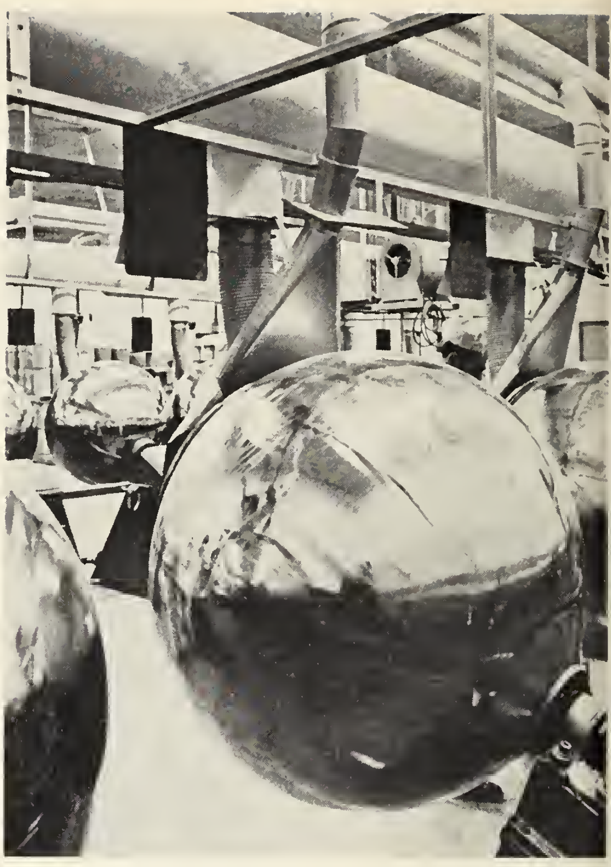
123. Why the Rise in Teenage Syphilis?
Case histories of adolescents who have contracted syphilis. Also, facts about how the disease is spread, its stages of development and the prognosis for cure. (2¢ each for 100 or more)

122. Why the Rise in Teenage Gonorrhea?
Tells why all the fuss about gonorrhea when its cause and cure are already known. Firsthand reports of teens who have acquired the highly contagious disease. (2¢ each for 100 or more)

12. Venereal Disease is Still a World Problem.
A report on the increase in syphilis and gonorrhea infections throughout the world. A frank discussion of how V.D. is spread, early symptoms, proper treatment and effects of neglect. (2¢ each for 100 or more)

Timely Tip — V.D.'s Dubious Distinction
A leaflet that tells how syphilis and gonorrhea are spread, who the victims are, signs and symptoms and what to do to assure prompt diagnosis, treatment and cure. (10¢ per 100)

V.D. Poster
A dramatic reminder to learn the facts about V.D. and to confide in your physician. 2 colors 18½" x 22⅞", fits into frame of AMA Health Education Poster Series. (35¢ each)



Be sure to read the review on Pages 992-993 of the social and economic aspects of the pharmaceutical industry.

Gallup Finds Public Rates Physicians High

In a 1965 study of the public's rating of professions made by the Gallup Poll for the National Society of Professional Engineers, the public was asked this question:

"Suppose a young man came to you and asked your opinion about taking up a profession. Assuming that he was qualified to enter any of these professions, which one of them would you first recommend or suggest to him?"

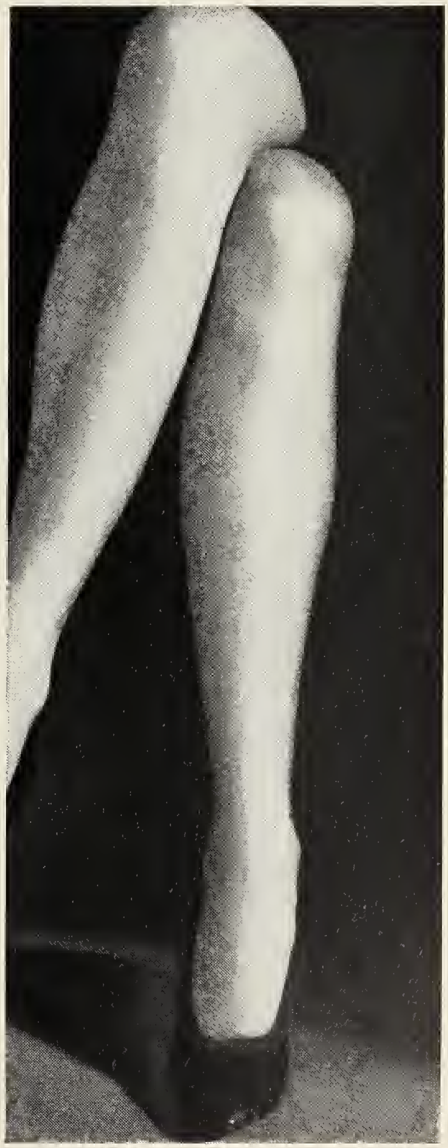
The results:

Physician	33%	Professor	4%
Engineer	18%	Government administrator	3%
Scientist	11%	Banker	2%
Lawyer	7%	Others	2%
Dentist	5%	Didn't know	8%

DETROIT — The noted British ophthalmologist and geneticist, Dr. Arnold Sorsby, was the Visiting Professor of Ophthalmology at the Wayne State University School of Medicine, October 13-15. Dr. Sorsby also addressed the Detroit Opthalmology Society on "Some Newer Hereditary Fundas Affections."

If you can't alarm her into wearing elastic stockings...

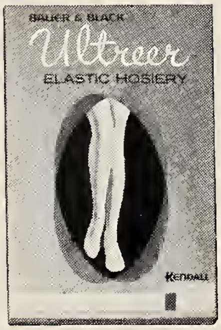
charm her with Ultreer™



You see, a woman simply has no defense against Ultreer Elastic Stockings. They look like lovely support stockings. They feel like lovely support stockings. They're that sheer, and shapely and comfortable.

But that's where the similarities end. New Ultreer fits firmly and evenly over the entire leg. Gives true therapeutic compression necessary to relieve varicose veins and other leg disorders. Each pair provides the therapy you prescribe. And at such a low price, a woman can afford two pairs of Ultreer as easily as she can afford one pair of ordinary elastic hosiery.

Ultreer. What a stocking.



KENDALL
BAUER & BLACK SUPPORTS DIVISION

From the Mailbag

Dear Mr. Brenneman:

Enclosed find a copy of a letter from Mr. Brick Fowler, athletic director from Port Huron, Michigan, showing the appreciation for an Athletic Clinic conducted by the physicians mentioned. The St. Clair County Medical Society is sending you this copy as an indication of their continued local efforts and community relationship.

These physicians are to be commended for putting on such an excellent Clinic which as you can see, may lead to future plans in years to come.

Sincerely yours,
Robert E. Rowe, M.D., President
St. Clair County Medical Society

Dr. Robert Rowe, President
St. Clair County Medical Association
108 McMorran Boulevard
Port Huron, Michigan

Dear Dr. Rowe:

I would like to express my appreciation to the St. Clair County Medical Association and to the committee in particular that put on the Athletic Clinic on Prevention and Care of Athletic Injuries last night here at our high school. It was well received by the athletic and physical education people from Port Huron and the Thumb and River area. We especially want to thank Dr. W. J. Dinnen, Dr. Claud Ludwig, Dr. John Coury and Dr. William T. Davison for putting on an outstanding clinic. We also wish to thank Don Friederichs, the former trainer of the Detroit Pistons, whose talk on Training Methods added a great deal to the program.

We would like to start planning now for another clinic like this for next fall and we believe that we could get a much larger attendance if it was held a day or two before the opening of football practice. It would be nice if we could bring these athletic people into Port Huron for an afternoon of golf, then a dinner and then a clinic similar to what we had last night. We would be happy to sit in with you fellows in helping to set up the plans for next year's program.

Once more, please extend our appreciation to the Medical Association and their committee that did such an outstanding job for us.

Very sincerely yours,
Brick Fowler
Athletic Director
Port Huron High School

Dear Mr. Brenneman:

I wish to take just a few moments from your busy schedule to express to you and your entire staff our heartfelt appreciation. It is always a great credit for a city to host the annual meeting of the Michigan State Medical Society, and we are most appreciative to its entire membership for their support and patronage over these many years.

We would like to pay special tribute to you and your entire staff for a truly superb job of convention planning and operation. As you know, Grand Rapids is a major convention city, and hosts a great number of conventions annually. However, none can ever begin to approach the really excellent job of pre-planning and operation that was displayed by your people. The cooperation, understanding, support and courtesy extended by each of them was magnificent.

We are already looking forward to, and making preparations for your return in 1967. With the accelerated program of remodeling and revamping the facilities of the Pantlind Hotel and the Grand Rapids Civic Auditorium, we will be in an even better position to serve you. We will give you our wholehearted support and cooperation in all phases of pre-planning and putting on your 102nd annual meeting here in our city. We know it will be another outstanding event for M.S.M.S.

Bill DeHaan, Vice President
Director of Sales
Pantlind Hotel
Grand Rapids

* * *

I should like to express my sincere appreciation for your kind invitation to attend the Scientific Session of the Michigan State Medical Society, but previous commitments (not pressures) preclude my attending.

Despite the professed political differences of our hierarchy, your gesture gives evidence of sincerity of purpose with full consideration of the public welfare.

Again my sincere thanks.

Respectfully,
Name withheld
(from a Detroit D.O.)

* * *

I want to thank you for the great time I had at your annual meeting. Your arrangements, hospitality, and friendliness were superb. I enjoyed both the business and scientific meetings and you are to be complimented on their excellence.

Sincerely,
Frank E. Drew, M.D., President
State Medical Society
of Wisconsin.

STOP anxiety

but not your patient

For your anxious patients who must remain active, 'Stelazine' offers a specific, incisive antianxiety effect that can calm excessive anxiety without producing annoying dulling effects. On 'Stelazine' patients react more normally to stresses and at the same time remain alert enough to carry on their normal activities.

Stelazine®

brand of **trifluoperazine**

Before prescribing, the physician should be familiar with the complete prescribing information in SK&F literature or *PDR*. The following is a brief precautionary statement. *Contraindications:* Comatose or greatly depressed states due to C.N.S. depressants and in cases of existing blood dyscrasias, bone marrow depression and liver damage. *Precautions:* Use with caution in angina patients and in patients with impaired cardiovascular systems. Antiemetic effect may mask symptoms of other disorders. An additive depressant effect is possible when used with other C.N.S. depressants. Prolonged administration of high doses may result in accumulative effects with severe C.N.S. or vasomotor symptoms. Use in pregnant patients only when necessary for the patient's welfare. *Side Effects:* Occasional cases of mild drowsiness, dizziness, mild skin reactions, dry mouth, insomnia and amenorrhea. Neuromuscular (extrapyramidal) reactions (motor restlessness, dystonias, pseudo-parkinsonism) may occur and, in rare instances, may persist. In addition, muscular weakness, anorexia, rash, lactation, hypotension, and blurred vision have been observed. Blood dyscrasias and cholestatic jaundice have been extremely rare. For a comprehensive presentation of 'Stelazine' prescribing information and side effects reported with phenothiazine derivatives, please refer to SK&F literature or *PDR*.

Smith Kline & French Laboratories. Philadelphia

Medical School Enrollment Jumps 25 Pct. In Past 25 Years; 11 New Schools Started

The nation in the past 25 years has seen considerable increases in the number of U. S. medical schools, the enrollment of medical students, and the number of medical graduates.

In 1940 there were a total of 77 medical schools in the U. S. including 10 schools offering two-year programs in the basic medical sciences. In 1965 there were 88 U. S. schools of medicine including 3 schools offering two-year programs in the basic medical sciences.

Medical school enrollment in 1965 reached 32,428, a 53 per cent increase over the 21,271 medical students enrolled in 1940. The annual number of medical graduates totaled 7,409 in 1965, an increase of 45 per cent over the 5,097 graduates in 1940.

Expansion of the 77 schools existing in 1940, including the transition of 7 of the basic medical science schools to the full four-year medical curriculum, provided a major increase in medical school enrollments of 7,810 or 35 per cent, and an increase in annual medical graduates of 2,312 or 30 per cent.

* * *

THE 11 NEW MEDICAL schools that developed in the years 1940-1965 accounted for an increase in student enrollment of 3,317, or 18 per cent, and an increase in annual graduates of 757, or 15 per cent. It is estimated that medical school enrollment in 1966 will total 32,873, an increase of 445 over the total enrollment of 1965.

At the present time, the creation of 15 new medical schools seems certain since responsible institutions have publicly announced decisions for their establishment and taken such steps as determining sites and appointing deans or equivalent administrative officers.

Twelve of the new schools now being planned will provide the full four-year medical curriculum and 3 plan to use a form of curriculum that will not include the clinical years of education.

* * *

AT LEAST 25 additional groups or institutions have initiated explorations or discussions in contemplation of the creation of new medical schools, the futures of which are still largely speculative.

Recently awarded basic improvement grants to 85 existing schools and 7 new schools are based on planned expansion that will result in 1967 in the creation of 992 additional places for medical students. Additional enrollment expansion is anticipated through Educational Facilities funding.

(From Datagrams, Association of American Medical Colleges, Vol 8, No. 3.)

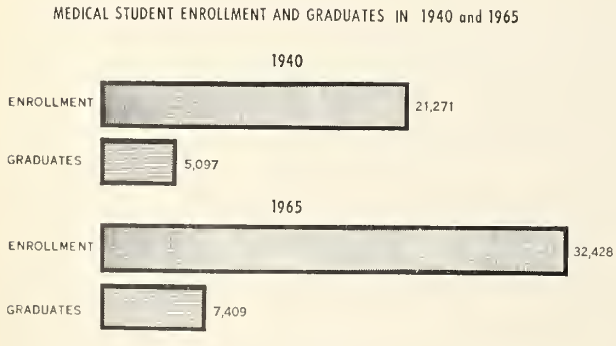


FIGURE 1

FIGURE 1 depicts the increases in medical student enrollment and annual graduates resulting from the expansion and addition of U. S. schools of medicine in the years 1940 through 1965.

KINGSWOOD HOSPITAL, Michigan's finest
and newest facility for intensive, short-term
treatment of voluntary
neuropsychiatric patients.

Philip N. Brown, M.D.
Medical Director

Marvin J. Lawrence, F.A.C.H.A.
Administrator

KINGSWOOD HOSPITAL
10300 W. EIGHT MILE ROAD
FERNDALE 20, MICHIGAN Telephone: Area 313 398-3200

IT'S AS PLAIN AS THE NOSE ON HIS FACE.

UP TO 10–12 HOURS' CLEAR BREATHING ON ONE TABLET

Dimetapp® Extentabs®

(Dimetane® [brompheniramine maleate], 12 mg.; phenylephrine HCl, 15 mg.; phenylpropanolamine HCl, 15 mg.)

In sinusitis, colds, or U.R.I., Dimetapp lets congested patients breathe easy again. Each Extentab brings welcome relief all day or all night, usually without drowsiness or overstimulation. Its key to success? The Dimetapp formula — Dimetane (brompheniramine maleate), a potent antihistamine reported in one study to have elicited side effects as few as the placebo,* teamed with decongestants phenylephrine and phenylpropanolamine — in a dependable 10- to 12-hour form.

*Schiller, I. W., and Lowell, F. C.: New England J. Med. 261:478, 1959.

Contraindications: Patients hypersensitive to antihistamines. Not recommended for use during pregnancy.

Precautions: Until the patient's response has been determined, he should be cautioned against engaging in operations requiring alertness. Administer with care to patients with cardiac or peripheral vascular diseases or hypertension.

Side Effects: Hypersensitivity reactions including skin rashes, urticaria, hypotension and thrombocytopenia have been reported on rare occasions. Drowsiness, lassitude, nausea, giddiness, dryness of the mouth, mydriasis, increased irritability, or excitement may be encountered.

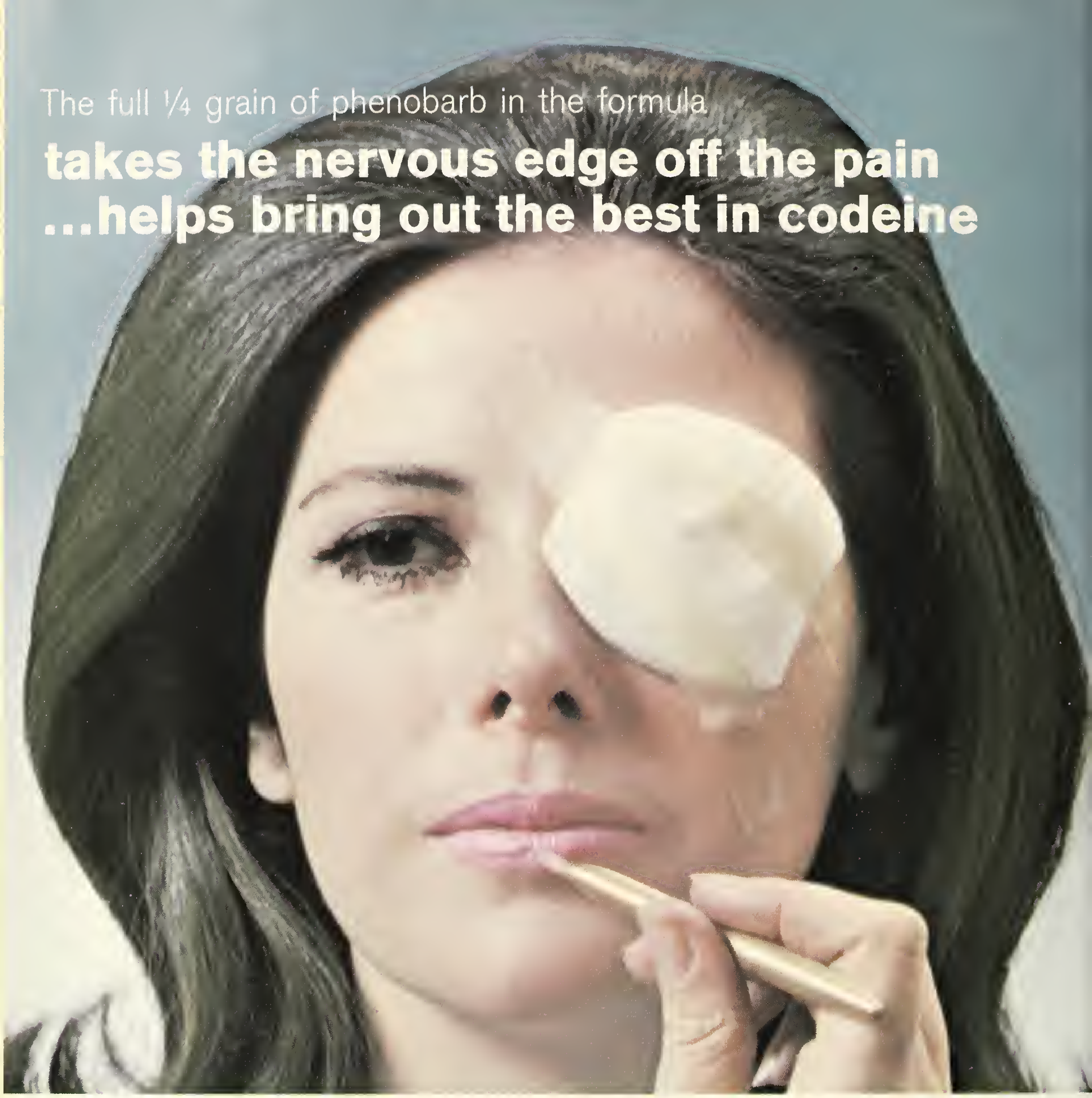
Dosage: 1 Extentab morning and evening, or as needed.

Supplied: Bottles of 100 and 500.

Also available: Dimetapp® Elixir for conventional *t.i.d.* or *q.i.d.* dosage.
See package insert for further details.

A. H. ROBINS CO., INC.
RICHMOND, VIRGINIA 23220

A·H·ROBINS


The full ¼ grain of phenobarb in the formula
takes the nervous edge off the pain
...helps bring out the best in codeine

Phenaphen® with Codeine

the only leading compound analgesic that calms instead of caffeinates

Each capsule contains:

Phenobarbital (¼ gr.)	16.2 mg.
(Warning: may be habit forming)	
Aspirin (2½ gr.)	162.0 mg.
Phenacetin (3 gr.)	194.0 mg.
Hyoscyamine sulfate	0.031 mg.
Codeine phosphate	¼ gr. (No. 2), ½ gr. (No. 3), 1 gr. (No. 4)
(Warning: may be habit forming)	

Contraindications: Hypersensitivity to any ingredient.

Precautions: As with all phenacetin-containing products, avoid excessive or prolonged use.

Side Effects: Side effects are uncommon—nausea, constipation, and drowsiness have been reported.

A·H·ROBINS

A. H. ROBINS CO., INC., Richmond, Va. 23220

DEAN HUBBARD NAMED AS LIBRARY ADVISOR

Dean William N. Hubbard, Jr., M.D., of the University of Michigan Medical School, is one of 14 members appointed by President Johnson to the National Advisory Commission on Libraries.

Doctor Hubbard, the only medical educator on the commission, is president of the Board of Regents of the National Library of Medicine, a federal agency.

Mediscene

Nov. 9-10 — Symposium on Ovary, Wayne County Medical Society Building, Detroit.

Nov. 18-19 — American College of Physicians, Michigan Region, Hotel Pontchartrain, Detroit.

Dec. 8 — Grand Rounds Clinic Day, St. Mary's Hospital, Grand Rapids.

Jan. 18-20 — Conference on Smoking and Health, Kellogg Center, Michigan State University, East Lansing.

Blues Set Record — Four Million Enrolled

Michigan Blue Cross and Blue Shield in October topped four million members — an all-time high for the two prepayment health care organizations.

"Representing, as it does, nearly half the population of Michigan, this figure is the result of steady growth throughout our 27-year history," Shield officials declared.

Earlier this year, the two plans passed another milestone — the $3 billion mark in payments for hospital and physician care for their members.

PARKE-DAVIS BUYS AEROPLAST COMPANY

Parke, Davis & Company has purchased for a cash consideration the assets and business of the Aeroplast Corporation, of Dayton, O., a subsidiary of Helene Curtis Industries, Inc.

Aeroplast markets surgical drapes and spray dressings used mainly in hospital operating rooms.

Distribution and sale of the acquired Aeroplast products will be assigned to the Parke-Davis Surgical Dressings Division.

INGRAM'S SERVICE DEPARTMENT

ALL FACTORY TRAINED MEN

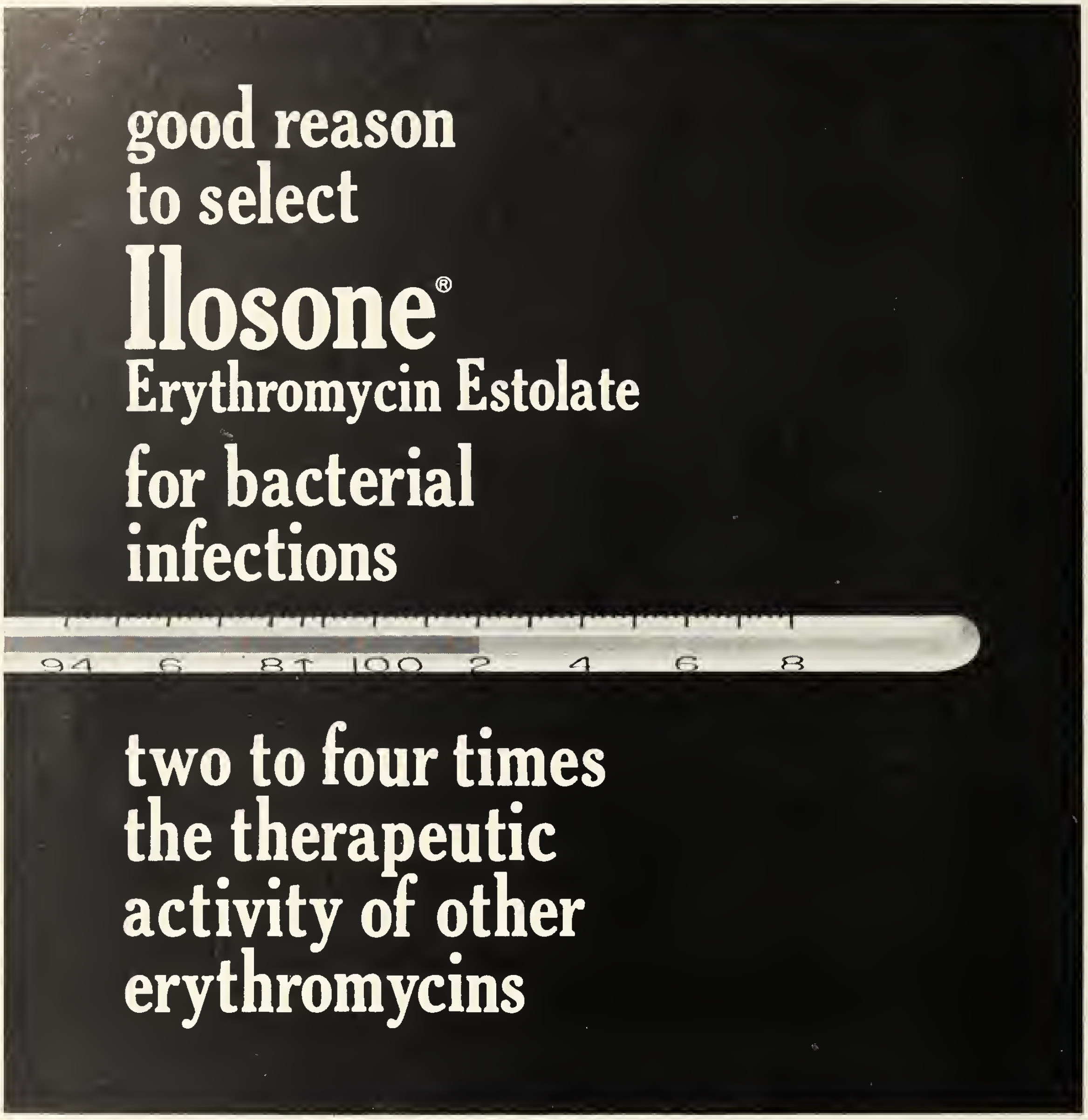
We service Medical Equipment, Electrocardiographs, Basal Metabalors, Sterilizers, Autoclaves, Diathermy Outfits, Cutting Units, Ultra Violet Lamps, Hydro Therapy Units, Laboratory Equipment. ALL BURDICK, LIEBEL FLARSHEIM AND RITTER EQUIPMENT.

If you have any Service problems, please call us at TE 2-4444, ask for the SERVICE DEPARTMENT and we will gladly help in any way we can.

THE G. A. INGRAM COMPANY

4444 Woodward Avenue TEmple 2-4444 Detroit, Michigan 48201

Say you saw it in Michigan Medicine



good reason
to select
Ilosone®
Erythromycin Estolate
for bacterial
infections

two to four times
the therapeutic
activity of other
erythromycins

CONTRAINDICATIONS: Ilosone is contraindicated in patients with a known history of sensitivity to this drug and in those with preexisting liver disease or dysfunction.

SIDE-EFFECTS: Even though Ilosone is the most active oral form of erythromycin, the incidence of side-effects is low. Infrequent cases of drug idiosyncrasy, manifested by a form of intrahepatic cholestatic jaundice, have been reported. There have been no known fatal or definite residual effects. Gastro-intestinal disturbances not associated with hepatic effects are observed in a small proportion of patients as a result of a local stimulating action of Ilosone on the alimentary tract. Although allergic manifestations are uncommon with the use of erythromycin, there have been occasional reports of urticaria, skin eruptions, and, on rare occasions, anaphylaxis.

DOSAGE: *Children under 25 pounds*—5 mg. per pound of body weight every six hours. *Children 25 to 50 pounds*—125 mg. every six hours. *Adults and children over 50 pounds*—250 mg. every six hours. For severe infections, these dosages may be doubled.

Available in Pulvules®, suspension, drops, and chewable tablets. Ilosone Chewable tablets should be chewed or crushed and swallowed with water.

Additional information available to physicians upon request.
Eli Lilly and Company, Indianapolis, Indiana 46206.

Lilly

600541

ORIGINAL SCIENTIFIC ARTICLE

Use of Furosemide, A New Oral Diuretic, In the Nephrotic Syndrome

By Gerard Gros, M.D.
James A. Greene, Jr., M.D.
John M. Weller, M.D.
All of Ann Arbor

Since the introduction of chlorothiazide, oral diuretics have been used in the treatment of nephrotic states with considerable success.

The thiazide drugs, with or without the addition of an aldosterone antagonist or like-acting compound, have usually been effective in bringing about diuresis. In some instances, however, patients having nephrotic diseases have not had a satisfactory diuretic response. Additional diuretics which are more potent, therefore, have been developed.

Furosemide* is such a new diuretic drug which has been reported to be effective in edematous states of renal origin, as well as those due to cardiac or hepatic disease.[1]

The following is a report of the use of furosemide in 10 patients having the nephrotic syndrome.

CLINICAL MATERIAL

Ten hospitalized patients having nephrotic diseases were studied. Pertinent clinical data are summarized in Table I. The diagnosis of the nephrotic syndrome was made on the basis of the clinical picture which usually included in addition to the presence of edema one or more of the following: 1. proteinuria in excess of 3.5 Gm./24 hrs., 2. hypoalbuminemia or 3. hypercholesterolemia. Histological determination of the diagnosis was obtained by kidney biopsy in 5 instances. All patients had moderate to marked peripheral edema. Some also had ascites.

Seven of the 10 patients had significant decreases (greater than 50 per cent reduction) of their glomerular filtration rates as measured by the endogenous creatinine clearance. Nine of the 10 patients prior to the administration of furosemide had failed to respond satisfactorily to a program consisting of a low sodium diet and various combinations of other diuretic drugs.

* * *

AS PART OF the evaluation of the effects of furosemide as a diuretic agent in nephrotic disease, the following were measured: body weight, 24-hour urine output, standing and lying blood pressure, 24-hour urine protein excretion, 24-hour endogenous creatinine clearance, 24-hour urine sodium and potassium, blood urea nitrogen, total serum protein and albumin/globulin ratio, fasting blood sugar, and serum cholesterol, sodium, potassium, chloride, carbon dioxide combining power, and uric acid. In addition the hematocrit, hemoglobin, total white blood cell and differential counts were also determined.

Furosemide was given in an initial dose of 40 mg. and the dosage was increased by increments of 40 mg. every 6, 12, or 24 hours until diuresis ensued. In most instances the drug was administered over a period of 3 to 6 days. All patients were on a restricted sodium intake varying from 200 to 1000 mg. sodium per day.

With furosemide therapy a prompt and copious diuresis occurred in 8 of our 10 patients with a corresponding fall in the body weight and clinical improvement of the edematous state (Table II). The amount of furosemide required to bring about effective diuresis ranged from a total of 80 to 600 mg. per day. Sodium excretion in one patient reached 537 mEq./24 hours. The urine sodium:potassium ratio varied from 0.2 to 6.1. When furosemide was stopped, the amount of sodium excreted dropped sharply, while potassium excretion continued to be elevated for 2 to 3 days. Two patients developed mild hyponatremia (serum sodium levels of 132 and 133 mEq./liter), although slight elevation of the serum sodium concentration was nearly as common as was depression. The serum potassium concentration likewise went up

---

All three authors are members of the Department of Internal Medicine of the University of Michigan Medical School. Doctor Gros is an Instructor, Doctor Greene, an Assistant Professor, and Doctor Weller, a Professor.

---

* Furosemide (4-chloro-N-furfuryl-5-sulfamoylanthranilic acid) was kindly supplied as Lasix® by Hoechst Pharmaceuticals, Inc.

TABLE I

PATIENT	AGE (YEARS)	SEX	CLINICAL DIAGNOSIS	CREATININE CLEARANCE (LITERS/24 HOURS)	SERUM ALB./GLOB. (Gm./100 ml.)	SERUM CHOLESTEROL (mg./100 ml.)	TOTAL 24-HOUR URINE PROTEIN (Gm.)
A. H.	53	M	Chronic Glomerulonephritis	9	1.09/2.61	465	29.4
J. C.	23	M	Chronic Glomerulonephritis	145	0.63/2.57	875	18.3
J. L.	49	M	Chronic Glomerulonephritis	97	1.15/2.65	387	13.6
M. G.	35	F	Chronic Glomerulonephritis	150	0.60/2.20	860	16.0
C. G.	52	M	Diabetic Glomerulosclerosis	45	2.85/2.95	240	1.1
J. K.	38	F	Chronic Glomerulonephritis	12	2.15/2.55	155	4.3
E. K.	37	F	Chronic Glomerulonephritis	24	2.10/3.40	248	18.1
N. W.	32	F	Subacute Glomerulonephritis	69	1.59/2.91	642	12.1
A. S.	55	F	Diabetic Glomerulosclerosis	17	2.51/3.09	175	8.3
C. H.	14	F	Acute Glomerulonephritis	26	0.77/3.39	515	11.0

nearly as often as it went down and slight hypokalemia in two patients (3.3 and 3.4 mEq./liter) was not of clinical importance.

* * *

A TENDENCY TO develop hypochloremia and alkalosis occurred in most patients with a lowering of the mean serum chloride concentration of 6.6 mEq./liter and an elevation of the mean carbon dioxide combining power of 2.8 mM./liter. Three patients did show a significant rise in the serum creatinine concentration with diuresis (1.68 to 4.30, 4.70 to 9.65, and 3.90 to 5.88 mg./100 ml.). Similarly the blood urea nitrogen level rose in 4 instances. An increase in the fasting blood sugar of considerable magnitude took place in one diabetic patient, most likely related to poor control with insulin which was present even prior to giving furosemide.

In the other patients lowering of the fasting blood sugar level at the end of furosemide therapy as compared to that at the beginning was actually more common than its elevation. Asymptomatic hyperuricemia was nearly a universal finding after furosemide therapy with the mean post-drug serum uric acid being 9.85 mg./100 ml. with a range from 6.9 to 14.7 mg./100 ml. Total serum proteins, hematocrit, hemoglobin, white cell count and differential count remained essentially at pretreatment levels. Figure 1 illustrates the typical diuretic response produced by furosemide.

Side effects related to furosemide therapy were minimal. Postural hypotension occurred in one patient who experienced a marked and prolonged diuresis despite decreasing the dosage of furosemide. Other than in this one patient no significant drop in arterial blood pressure was noted, including those patients with elevated blood pressure readings.

DISCUSSION

The mechanism of the diuretic action of furosemide has been studied extensively. This drug interferes with sodium reabsorption by the kidneys in normal subjects as well as in patients with edematous states.[2]

In animal experiments, an increase in glomerular filtration rate has been noted in the early phase of diuresis when this drug is administered.[3] Micropuncture studies in dogs and rats have demonstrated a 40% decrease in proximal tubular re-

Watch for It!

The December issue of Michigan Medicine will contain six excellent scientific articles. The lead article is a timely one — about "Acute Fatal Thrombocytopenia Occurring with Clinical Rubella."

Watch for your December issue and more original articles to help you continue your education.

absorption of sodium chloride and water and additional experiments indicate interference with sodium reabsorption in the ascending limb of Henle's loop; making them major sites of action of furosemide.[4] The effect of this drug has been demonstrated also at the distal tubule of the nephron by micropuncture and stop-flow studies in rats and dogs.[5] Furosemide is, therefore, an agent which acts throughout the nephron, thereby causing greatly increased sodium excretion.[6]

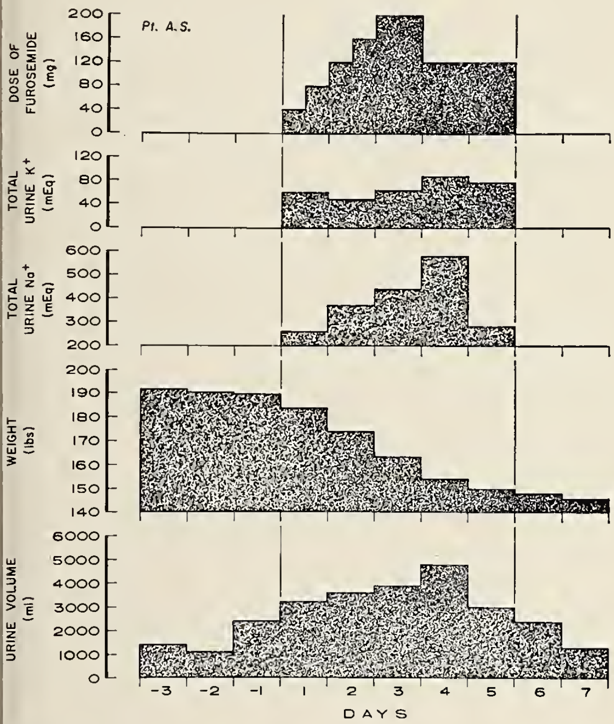


Figure 1. Typical diuretic response to furosemide as illustrated by patient A.S. The 3 control days before starting furosemide are indicated by minus signs. The dose of furosemide was steadily increased during the first 3 days of therapy to a maximum of 200 mg. twice a day. Urine output rose steadily to 4,820 ml. per day and body weight fell progressively. The increase in sodium excretion was of much greater magnitude than that of potassium.

Unlike many of the thiazide drugs, furosemide has virtually no carbonic anhydrase inhibitory effect.[7] Furosemide does not appear to exert any aldosterone antagonism. The action of furosemide is primarily saliuretic; water diuresis follows sodium diuresis. Potassium diuresis resulting from furosemide therapy is proportionately less than sodium diuresis. The sodium:potassium excretion ratio of the patients in our series who responded well to the drug ranged from 1.0 to 6.1.

* * *

OTHER INVESTIGATORS have likewise found that the sodium:potassium excretion ratio for furosemide compares favorably with that for chlorothiazide.[8] The 2 patients who failed to respond to furosemide had sodium:potassium excretion ratios of 0.2 and 0.4, respectively, suggesting a state of intense secondary hyperaldosteronism.

It is to be noted that most of our patients had significantly decreased glomerular filtration rates. In spite of this nearly all experienced effective diuresis. Such a result indicates that furosemide is sufficiently potent to cause natriuresis and diuresis even in the face of a diminished filtered load of sodium and water. This substantiates the finding of other investigators that the presence of renal functional impairment need not be a contraindication to the use of this drug.[7, 9]

When using furosemide, it should be taken into account that the diuretic response is rapid in onset (within one hour) and of short duration (6 to 8 hours maximum). It is, therefore, possible to give two or three doses in a 24-hour period increasing the amount of each by 40 mg. until diuresis ensues. Diuresis may then be maintained by giving the dose of proven effectiveness once or twice daily according to the degree of diuresis which is felt to be desirable. Individualization of dosage is thereby readily attained and, indeed, is

TABLE II

PATIENT	TOTAL WEIGHT LOSS DURING TREATMENT (pounds)	DURATION OF TREATMENT (days)	MAXIMUM URINE OUTPUT DURING TREATMENT ml./24 hrs.)	MAXIMUM SODIUM EXCRETION DURING TREATMENT (mEq./24 hrs.)	URINE Na/K ON DAY OF MAXIMUM OUTPUT (units)	FUROSEMIDE DOSE ON DAY OF MAXIMUM OUTPUT (mg./24 hrs.)
A. H.	4	3	2705	135	1.7	80
J. C.	¼	12	2430	34	0.2	560
J. L.	7	8	3775	122	1.0	400
M. G.	12¼	3	3425	369	4.7	240
C. G.	13¾	6	2905	269	3.0	360
J. K.	15	4	4530	400	5.0	280
E. K.	9	3	3420	292	4.0	600
N. W.	14½	5	3900	251	3.5	400
A. S.	38½	5	4820	537	6.1	400
C. H.	2½	6	1225	18	0.4	400

Furosemide, a new, potent, orally active diuretic, has been used in the treatment of ten patients having edema associated with the nephrotic syndrome. Satisfactory diuresis was promptly achieved in eight and occurred even when renal function was significantly impaired as evidenced by a reduction in the glomerular filtration rate. Individualization of dosage was necessary; the diuretic response increasing as the amount of drug administered is increased.

even necessary as this potent diuretic agent, if given in excess, can cause such a profound diuresis that it will lead to severe water and electrolyte depletion.

SUMMARY

Furosemide, a new oral diuretic agent, was used in the treatment of 10 patients having edema associated with the nephrotic syndrome. The glomerular filtration rate, as measured by the endogenous creatinine clearance, was considerably reduced in 7.

With furosemide therapy a prompt, satisfactory diuretic response with weight loss and clinical improvement of the edematous state occurred in 8 of the 10 patients. Side effects were negligible. The effective therapeutic dosage of furosemide ranged from a total of 80 to 600 mg. per day. The diuretic response increased with an increasing dose of the drug in any given patient.

These studies demonstrate that furosemide is a potent oral diuretic agent which is useful in the treatment of edema due to the nephrotic syndrome.

REFERENCES

1. Timmerman, R. J., Springman, F. R., and Thoms, R. K.: Evaluation of fursemide, a new diuretic agent Curr. Ther. Res. 6: 88-94, 1964.
2. Brest, A. N., Seller, R., Ramirez, O., Onesti, G., and Moyer, J. H.: Comparative diuretic efficacy of furosemide. J. New Drugs 5: 329-332, 1965.
3. Greene, J. A., Jr., and Weller, J. M.: Enhancement of glomerular filtration by furosemide. Fed. Proc. 24: 404, 1965.
4. Deetjen, P.: Mikropunktionsuntersuchungen zur Wirkung von Furosemid. Pflugers Archiv 284: 184-190. 1965.
5. Malnic, G., Vieira, F. L., and Euokibara, H.: Effect of furosemide on chloride and water excretion in single nephrons of rat kidney. Nature 208: 80-81, 1965.
6. Suki, W., Rector, F. C., Jr., and Seldin, D. W.: The site of action of furosemide and other sulfonamide diuretics in the dog. J. Clin. Invest. 44: 1458-1469, 1965.
7. Berman, L. B., and Ebrahimi, A.: Experiences with furosemide in renal disease. Proc. Soc. Exper. Biol. & Med. 118: 333-336, 1965.
8. Verel, D., Rahman, F., Stentiford, N. H., and Saynor, R.: A clinical trial of frusemide. Lancet 2: 1088-1089, 1964.
9. Muth, R. G.: Diuretic response to furosemide in the presence of renal insufficiency. J.A.M.A. 195: 1066-1069, 1966.

Haste Makes Waste

By The Rev. Vernon E. Kuehn
Harper Hospital Chaplain

When James Garfield (later president of the United States) was president of Hiram College in Ohio, a father asked him if the course of study couldn't be simplified so that his son might be able to "go through by a shorter route."

"Certainly," Garfield replied. "But it all depends upon what you want to make of your boy. When God wants to make an oak tree, He takes a hundred years. When He wants to make a squash, He requires only two months."

One wonders if, in this fast-moving era in which we are living, we are not producing more squashes than oak trees. One of the principles guiding our economic system is "planned obsolescence,"that is, a product is out-of-date almost at the time of purchase so the consumer will discard it and buy a newer model. The concern of industry is not on durability and quality, but rather on rapid turnover and forced consumer purchasing.

Another way we see this expressed is in the words we commonly use to describe our life. For instance: We "leap" out of bed; we "gulp" our coffee; we "bolt" our food; we "dash" off to the office; we "tear" home; and we "drop" dead. Our age is one of anxiety, impatience, aimlessness; of panaceas, quick cures, and shortcuts; of ulcers and crackups and breakdowns. Almost the first words a child hears from his parents these days are: "C'mon, hurry up!" And as if this isn't enough at almost every turn of his life, people around him will remind him that if he is "going to get anywhere in life, he'd better get a move on."

Perhaps Pascal had something when, centuries ago, he said: "All the troubles of man come from his not knowing how to sit still." The ancient psalmist reminds us that in God's sight a thousand years are but a day and the true meaning of life comes to us when we hear God's words: "Be still and know that I am God."

(From Harper Hospital Star)

TABLE I

PATIENTS DIAGNOSED AS NEW ACTIVE CASES
OF TUBERCULOSIS
ARRANGED ACCORDING TO SOURCE

SOURCE	1964	1965	Total
Private Physician Referral	45	34	79
Contacts	19	21	40
Mobile Survey	8	13	21
Veterans Administration	4	3	7
Nursing Home Referral	3	2	5
Industrial Physical	3	1	4
Tuberculin Survey	0	3	3
Total New Active Cases	82	77	159

"Active" Tuberculosis Contacts A Guide in Tuberculosis Control

By Oscar Bigman, M.D.
Margaret E. Berger
Both of Mt. Clemens

Tuberculosis control has gradually been changing. It was thought worthwhile to review recent data on tuberculosis case finding in a medium-sized, rapidly growing, semi-urban community, Macomb County, Michigan.

Table I shows the total number of new active tuberculosis cases diagnosed for each of the last two years and their sources. Referral by the private physician is seen to be the best source of new cases followed by examination of contacts to known cases. The mobile unit surveys remain useful. Other sources are not nearly as effective.

Table II demonstrates a closer study of the 40 contacts diagnosed as new active cases of tuberculosis during 1964 and 1965 by patient age, diagnosis, and the time interval from contact to diagnosis. It should be stated that 22 of these were household contacts (living in the same house as the source case); 18 were non-household contacts.

While 20 (or 50%) had the diagnosis established concurrent with the source case, the other half were diagnosed on subsequent followup. One, a 4-year old, was diagnosed after 3 months; 16 adults and 3 aged 15-18, after 5 months or more.

* * *

WHAT IS ADEQUATE follow-up? From the data, one can see that the common two-year follow-up is not adequate. Almost one-fourth (8 adults and 1 age 17) became active cases *after* the two-year interval; 4 of these contacts had the diagnosis established more than 5 years after first appearing in the tuberculosis registry. One contact became an active case 11 years after the initial exposure.

It is recognized that what we are considering a reactivation of latent focus may be a reinfection. However, we are looking at the data only from a public health view point. Reexamination of contacts in these cases has not uncovered a second source of exposure.

* * *

IT IS NOTED FURTHER that except for the one 4-year old who converted and became an active case after 3 months, there were no other children under 15 years of age diagnosed on subsequent follow-up. This may be explained by the fact that the Macomb County Health Department since 1961 has provided prophylactic isoniazid for

---

Both authors are with the Macomb County Health Department. Doctor Bigman is consultant in tuberculosis.

"Sources of active tuberculosis cases have been reviewed in a semi-urban community. The data indicates that the common two-year follow-up is not adequate for persons with positive tuberculin. On the other hand, contacts who remain non-reactors to the tuberculin test need only be followed about one year."

positive tuberculin reactors up to and including five years of age.

From Table III it can be seen that nobody who remained tuberculin negative six months after contact to a source case became a clinically active case. Obviously, a relatively brief follow-up is all that is needed for these people.

* * *

IN CONCLUSION, FOR improved tuberculosis control, the private physician should be encouraged to routinely skin test and X-ray his patients on a regular basis, follow-up of contacts with positive tuberculin should be prolonged, and the mobile unit surveys extended. Prevention of activation of disease in contacts by prophylactic administration of isoniazid should be considered.

As a result of this study, the Macomb County Health Department has adopted a policy of scheduled 5-year follow-up of all positive reactors. Prophylactic isoniazid is now offered to all current tuberculin reactors through age 18 as well as to all known converters and to contacts with positive tuberculin regardless of age.

TABLE II

CONTACTS DIAGNOSED AS NEW ACTIVE CASES OF TUBERCULOSIS, 1964-65

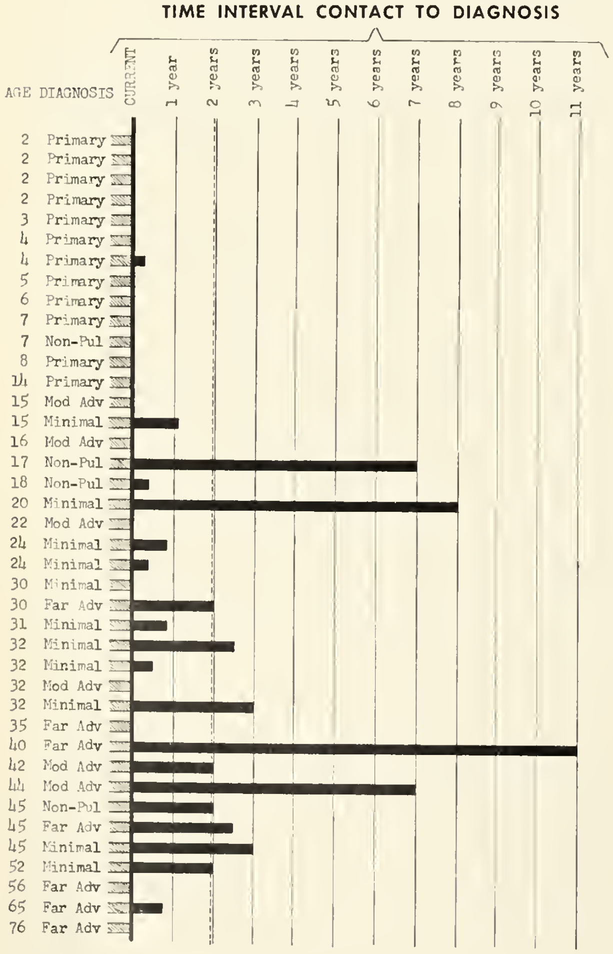


TABLE III

TUBERCULIN CONVERSION DATA CONTACTS DIAGNOSED ACTIVE TUBERCULOSIS, 1964-65

Positive when first seen in Clinic	36 cases
Positive within 3 months	1 case
Positive within 6 months	2 cases
Not recorded	1 case
Total	40 cases

RELATIONS OF ASTHMA AND TEMPERATURE CHANGE

The first colder weather of fall is a bad time for asthma sufferers.

When New York City's temperature first dropped below 55 degrees last September, emergency clinic visits by asthmatics shot upward at three major city hospitals. At one hospital, visits were 195 per cent over average during the first colder day, September 25-30.

A recent report shows that similar increases occurred in preceding years. The authors, however, say they do not know the cause.

Asthma attacks were not related to high pollen counts or air pollution, they said. In fact, pollen was at a relatively low level on the days of most frequent attacks.

Asthma attacks may be directly related to cold weather, or there may be an indirect relationship with some other factor, the authors said. *AMA Archives of Environmental Health, May 1966.*

ORIGINAL
SCIENTIFIC
ARTICLE

Abstract: Research in the biology of memory may have profound effects upon the behavioral sciences. Memory is processed by a subcortical filing and retrieval circuit which also mediates emotion. It is apparently stored in the temporal lobes and coded by changes in macromolecular polynucleotide. Interplay between neuron and oligodendroglia may create the "memory trace" and enormously increases storage of brain for information.

On the Nature of Memory

By Elliot D. Luby, M.D.
Detroit

It is obvious that a medical student could never progress beyond the first day of the freshman year were it not for his memory.

Not only would he stumble over the origin and insertion of the masseter muscle, but his professor would be a stranger and the school itself a perplexing mass of brick with no linkage to his past.

Without memory, we would all be empty, disoriented, impulse bound creatures with no history, capacity to create, or social organization. The world would be forever slipping away and there would be no comparative cognitive or emotional framework to hang any experience on.

Disordered memory is the basis of much psychopathology as, for example, the recent memory loss following brain damage. Indeed all psychiatric disease can be conceptualized as being related to the mishandling of memories.

* * *

MEMORY CAN BE defined as the recording of an event by the brain so that in varying degrees it can be recalled, recognized or recreated after it has happened. Plato analogized this process to the etching of an impression upon a block of wax. Sometimes the impression is deep, lasting, impossible to erase while on other occasions, it is fleeting and evanescent.

Where are memory traces laid down and how? What is the mechanism of retrieval? How can a Proust write in such magnificent and exquisite detail the bittersweet recollections of his mother in Swanns Way?

A primary function of memory is the provision of behavioral strategies which have proved most successful to the organism in the reduction of its drive states and the avoidance of danger. Memory can thus be viewed as having two basic categories. The data of one are readily accessible as guidelines for future action having approach or reward characteristics, while the contents of the other, not as accessible, serve to set off pain or avoidance responses. Such memory may already be programmed into the neural circuitry of the animal at birth and can thus be described as innate or else it may be acquired later; that is learned. In phylogenetic progression, elements constituting the former or innate grouping have become less and less important and thus dissociated.

* * *

THE FACT THAT the tabula rasa is not the clear page Lock hypothesized is nicely exemplified, at least in lower forms, by the frog. In the frog, Lettvin[1] has described in "What the Frog's Eye Tells the Frog's Brain" different features of the frog's world which are apparently already coded in his neural tissue at tadpole hatching. These include fibers signifying a general darkening as though a large creature were appearing.

Another type of signal system apprises the frog of a small round object such as a fly. A third cir-

Author

Elliott D. Luby, M.D.

Doctor Luby is Director, Clinical Services, Lafayette Clinic, and Professor, Department of Psychiatry, Wayne State University School of Medicine.

cuit represents blueness and evokes jumping behavior, probably telling him "here is water."

Ethologists have documented an impressive array of genetically programmed behaviors in other organisms. Essentially animals seem to know what and how to do things at the required time without being taught.

Nest building during pregnancy is an example of such genetically transmitted memory. The chick who is already mysteriously aware of the essence of hawkness is another. The chick will not run from the profile of a duck with its long neck and short tail but will flee in terror from the short neck and long tail of the hawk, portrayed by a cardboard drawn along a string. The innate migratory patterns of certain birds like the sandhopper also illustrate this concept.

* * *

THAT MAN SHOULD at birth already be endowed with a considerable memory is suggested by the collective unconscious of Jung.[2] Jack London[3] artistically delineated such an idea in his novel "Before Adam."

"It was not till I was a young man, at college, that I got any clue to the significance of my dreams, and to the cause of them. Up to that time they had been meaningless and without apparent causation. But at college I discovered evolution and psychology, and learned the explanation of various strange mental states and experiences. For instance, there was the falling-through-space dream — the commonest dream experience, one practically known by first-hand experience to all men.

This, my professor told me, was a racial memory.

It dated back to our remote ancestors who lived in trees. With them, being tree-dwellers, the liability of falling was an ever-present menace. Many lost their lives that way; all of them experienced terrible falls, saving themselves by clutching branches as they fell toward the ground.

Now a terrible fall, averted in such fashion, was productive of shock. Such shock was productive of molecular changes in the cerebral cells. These molecular changes were transmitted to the cerebral cells of progeny, became, in short, racial memories.

* * *

THUS, WHEN YOU and I, asleep or dozing off to sleep, fall through space and awake to sickening consciousness just before we strike, we are merely remembering what happened to our arboreal ancestors, and which has been stamped by cerebral changes into the heredity of the race."

Such a formulation is not to be taken seriously but the suggestion that molecular changes in cerebral cells transmit memory was a brilliant one.

Our understanding of the biological mechanisms mediating memory has recently been considerably extended. The anatomical neurophysiological and biochemical substrates of memory are being revealed through a variety of experimental approaches.

In the 19th century, Prochaska and Gall attributed memory to the localized storage of sensory data in association areas of the brain. This work, supported by Pavlov and Head,[4] remained largely unchallenged until 1950 when Lashley[5] disputed it. There were no association areas he stated and memory had multiple representations at varying levels of neuronal organization. Neurons responded in combination or sets, extending throughout the entire nervous system.

Thus a memory could not be destroyed or extirpated because it was laid down so diffusely in a patterned neuronal network. The remarkable studies of Penfield[6] on human subjects suggested that Lashley's total brain hypothesis might be incorrect. He stimulated the temporal lobes of patients with convulsive disorders while they were undergoing surgery for the excision of focal lesions. They reported the re-experiencing of long forgotten scenes with the overpowering feeling that they were happening in the present.

* * *

THESE VIVID "memories" were of two types. In the first, there was the simple sensory experience, much like an auditory or visual hallucination.

In the second, some interpretation was given to the experience. For example, "A woman (D.F.) heard an orchestra playing an air while the electrode was held in place. The music stopped when the electrode was removed. It came again when the electrode was reapplied. On request, she hummed the tune, while the electrode was held in place accompanying the orchestra. It was a popular song. Over and over again, restimulation at the same spot produced the same song."[6]

He divided the interpretive responses into groups. (1) Recognition; the illusion that things seen, heard and thought are familiar (deja vu) (2) Visual illusion; the feeling that things seen are changing — for example, coming nearer or growing larger. (3) Auditory illusion; the illusion that things heard are changing. (4) Illusional emotion, the emotion of fear or, less often, loneliness, sorrow or disgust.

* * *

ALTHOUGH THESE WERE patients with abnormal brains Penfield concluded that the tem-

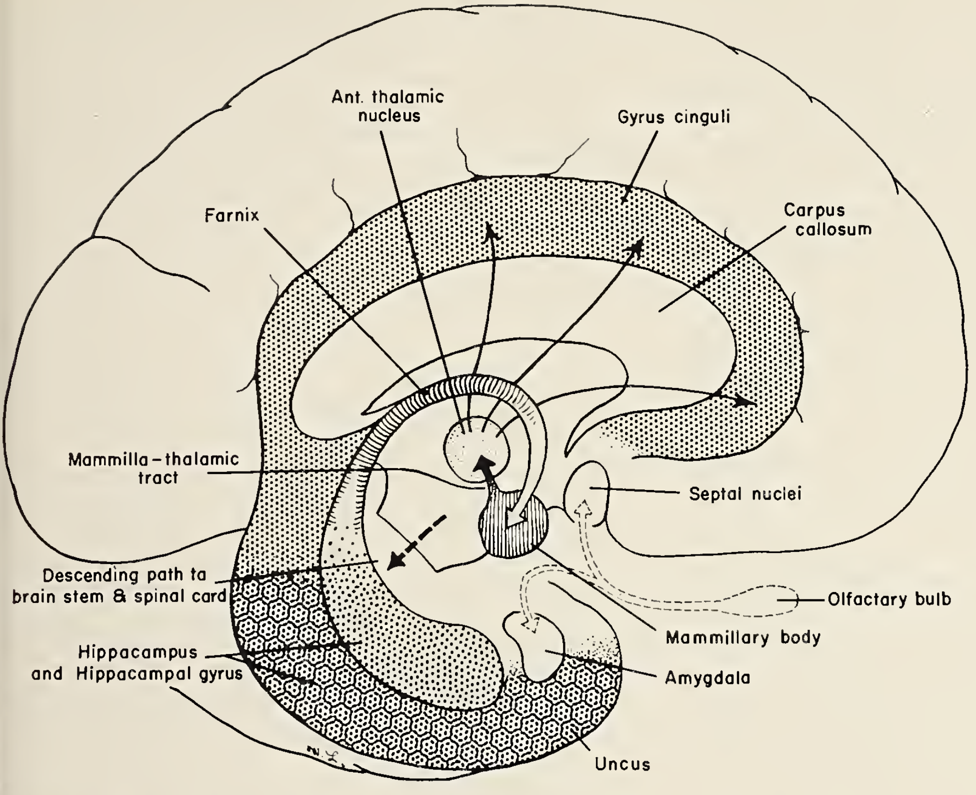


FIGURE 1. The Memory Circuit, Hippocampus, Hippocampal Gyrus, Cingulum, Fornix, Mammillary Bodies, Mammilo-Thalamic Tract, Anterior Nucleus of Thalamus and radiations to Cingulum.

poral lobes were the repositories or storehouses of sensory data and labeled them the experiential and interpretive cortex. These observations seem more pertinent to hallucinations than they do to memory but it is certainly not far fetched to attribute a warehouse function to these large silent areas of cortex.

Interest in the importance of subcortical structures in the physiology of memory was stimulated by neuropathological studies of patients with Korsakoff's syndrome. Here an inability to record or retain new memories is often accompanied by small lesions of the mammilary bodies. That such small structures can play an integral part in so crucial a human facility is surprising, but destruction of these bodies by a variety of causes including chronic alcoholism, carbon monoxide poisoning, metastatic carcinoma and pituitary tumors invariably leads to a severe memory deficit. Additional neuropathologic data indicated that similar defects could be produced by damage to the mammilothalamic tracts and to the anterior nucleus of the thalamus.

Finally recent work by Whitty and Lewin[7] has demonstrated that the hippocampus, the fornix, and, the cingulate gyrus are part of this memory circuit and that damage to any of these structures can result in a Korsakoff disturbance. There thus seems to be a mnestic or memory system; a circuit which involves the mammilary bodies, mammilothalamic tract, the anterior nucleus of the thalamus, the fornix, the hippocampus and possibly the cingulate gyrus.

* * *

WHERE HAVE WE seen these structures before? These subcortical areas are part of the limbic system or visceral brain, that section of the central nervous system which has been described as central to the elaboration of emotion. It is essentially a primitive processing system which integrates and interprets sensory input according to its affective meaning.

Thus it would appear that all experience is initially filed and categorized according to its emotional significance whether pleasurable or painful.

This passage from Marcel Proust's "Remembrance of Things Past" magnificently demonstrates the notion that memory is coded on the basis of affective meaning.

"And soon mechanically weary after a dull day with the prospect of a depressing morrow, I raised to my lips a spoonful of the tea in which I had soaked a morsel of the cake. No sooner had the warm liquid and the crumb with it, touched my palate than a shudder ran through my entire body, and I stopped intent upon the extraordinary change that was taking place. An exquisite pleasure had invaded my senses but individual, detached with no suggestion of its origin . . . this new sensation having had on me the effect which love has of filling me with a previous essence . . . whence did it come? What did it signify? How could I seize upon and define it?

"Will it ultimately reach the clear surface of my consciousness, this memory, this old dead moment which the magnetism of an identical moment has traveled so far to importune, to disturb, to raise up out of the very depths of my being . . . And suddenly, the memory returns, the taste was that of the little crumb of Madeleine which on Sunday morning at Combray, when I went to say good day to her in the bedroom, my aunt Leonie used to give me, dipping it first in her own cup of real, or of lime flower tea.

"And once I had recognized the taste of the crumb of Madeleine soaked in her decoction of lime flowers which my aunt used to give me, immediately the old grey house upon the street where her home was, rose up like the scenery of a theater to attach itself to the little pavilion, opening onto the garden, which had been built out behind it for my parents and with the house the town, from morning to night and in all weather, the square where I was sent before luncheon, the streets along which I used to run errands, the country roads we took when it was fine . . . so in that moment all the flowers in our garden and in M. Swann's park, and the water lilies on the Vivonne and the good folk of the village and their little dwelling and the parish church and the whole of Combray and of its surroundings, taking their proper shapes and growing solid, sprang into being, town and garden alike, from my cup of tea."

* * *

ALL OF THE DETAILED structure of his past arising out of a cup of tea or more properly from the warmth and pleasant happiness associated with the tea and a crumb of Madeleine. How often the artist anticipates and puts into words in a less precise but more compelling way the work of the scientist.

When this affective filing and retrieval apparatus is destroyed by a lesion in any of its parts, the laying down of memory traces cannot occur and a severe anterograde amnesia results. It is apparently not only the filing but the arousal and set shifting required for the maintenance of attention that is so important for the physiology of memory. This mnestic system together with the reticular core provides the drive or the narrowing of attention required for registration of sensory input and its subsequent retention. If you cannot attend to the written or spoken word, you, of course, cannot remember it.

* * *

SO MUCH FOR the anatomy of memory, now what about its histology and biochemistry?

Afew years ago, Holger Hyden[8] began to study the changes in neurons which occur after stimulation. He rotated rabbits in a cage and then looked at their vestibular nuclei. He observed that such rotation resulted in a large increase in ribonucleic acid (RNA) in the cytoplasm of the cell. Considering that desoxyribonucleic acid (DNA) was the transmitter of genetic memory it was but a short step for Hyden to conclude that RNA was the probable substrate for experiential memory.

McConnell[9] came to a similar conclusion by studying conditioning in planaria. Despite its primitive nervous system, the planarian is capable of learning. McConnel placed the worms in a trough of water through which he sent an electric current. The worms responded by contracting. He then warned them of the impending shock by flashing a light and was delighted to find that after 134 trials, the planaria doubled up in response to the light. Each worm was then divided in two and both head and tail were retrained. Following this sectioning the head was conditioned in 40 trials and the tail, not far behind, required only 43.2 trials to relearn the task.

The memory trace thus seemed to be laid down, amazingly, in the entire body of the worm. To add to this electrifying discovery, Corning and John[10] added ribonuclease to the water (an enzyme which breaks down RNA) and found that the tail forgot while the head remembered. The body memory was evidently mediated by RNA while the head utilized both RNA and another mechanism.

McConnell[11] then became intrigued by the possibility that knowledge might be edible. He trained his planaria to criterion, utilizing the already described conditioning procedure. After grinding them up into fine, edible pieces, he fed them to untutored planaria. Shades of oral incorporation, the untrained cannibals feasted on their departed, learned brethren and thus reinforced, required half as many trials as a control group to acquire the conditioned response. Facilitation of learning can be accomplished, at least in planaria, by feeding coded RNA.

* * *

OTHER LINES OF investigation have also begun to implicate RNA in memory mechanisms. Infant rats raised in a black chamber and completely visually deprived, developed deficiencies in RNA production in their retinal ganglion cells.[12] Finally in Montreal, Cameron[13] administered RNA to patients with arteriosclerotic cerebrovascular disease and reported moderate improvement in recent memory as measured by a number of objective tests.

At one time it was believed that the truly functional cells of the CNS were the neurons. From additional work of Hyden[14] it appears that the supportive cells are metabolically active and do more than hold the neurons together. He observed a close relationship between oligodendroglia and neurons which involve some fascinating biochemical interchanges between the two cells. When a neuron is stimulated energy production naturally increases with a greater turnover of high energy phosphorylation and a shift to aerobic glyolysis. While neuronal energy is being depleted glial energy stores are multiplying and are then made available to the fatigued neuron by pinocytosis.

The same phenomenon occurs with RNA production. During excitation, it increases in the neuron while diminishing in the glial cell. After cessation of stimulation, the glial cell synthesizes RNA which it can then later make available to the neuron during excitation. Also glial cells are capable of reproduction while neurons are not, so that RNA altered by sensory input can be replicated. The capacity of the brain to store data is thereby vastly increased. Glial cells have other responsibilities it would seem. Recall the Schwann cells which guide a regenerating nerve along the true path of reestablishing its anatomical integrity. Centrally glial cells appear to control the migration of dendrites and the formation of new synapses in the same way.

Thus a neural network subserving a particular memory may well be organized by the masterminding of the hitherto neglected oligodendroglia with the direction of dendritic migration coded by changes in RNA.

* * *

THE RULES OF learning emphasize the importance of repetition followed by intermittent periods of rest. Jumps in learning often follow such interval respite and psychologists call this phenomenon reminiscence. Apparently some kind of neurochemical fixing or consolidation must occur in the brain before memory assumes a degree of permanency.

There is good evidence for such a hypothesis. At the Lafayette Clinic, Poschel[15] gave rats a two-day series of convulsions at the rate of five per day. The rats were then trained to criterion on a food reward task which required the running of a maze to a goal box. At the box they received a shock to their feet to induce an approach avoidance conflict. Half of the animals received seizures prior to conditioning and the other half following it. Both groups avoided the goal box significantly less than the control group which was not convulsed. The convulsions then somehow prevented the learning or the consolidating of the conditioned avoidance response, and it made no difference whether they were given prior to or following the conditioning.

Subsequent research suggests that the alterations in brain functioning produced by shock must occur within 24 hours of a conditioned response in order to prevent its "fixing." Otherwise the memory trace is laid down and acquires some permanency. Consolidation of a memory trace is probably a neurochemical process which needs about 24 hours for its consummation. The amnesia resulting from head trauma and involving events immediately leading up to the injury can be explained on the basis of interference with this process.

To summarize, then, the filing of memory is somehow accomplished by a subcortical system already associated with the elaboration of affect. Its anatomical warehouses are probably in the temporal lobes and it is apparently coded by alteration in the structure of RNA which is interchanged between oligodendroglia and neuron. These structural changes must be consolidated over a period of 24 hours and can be interfered with by electroshock or head trauma.

Nature is a parsimonious woman and it would not be surprising if all information transmission, genetic, immunologic and experiential, were handled by similar mechanisms. Only a few years ago the genetic code seemed virtually undecipherable but its secrets have been unveiled by the work of brilliant biochemists and molecular biologists.

Heredity is a type of memory in which information is transmitted from one generation to another by means of a nucleic acid code. Nucleic acid coding is then transferred from one polynucleotide to another, eventually being translated into polypeptide coding. Immunologic reactions are essentially similar biological memories in which a reticuloendothelial cell is somehow enabled to "remember" its encounter with a particular antigen in such a way that it synthesizes specific antibody upon all further contacts. Immunologic coding also depends upon specific alterations in macromolecular polynucleotide which then apparently acts as a template for antibody production.

Hyden[8] assumed that acquired memory results when RNA is specifically labeled by sensory input so that particular circuits respond when they are once more presented with the same sensory data. He suggests that the electrochemical pattern of the cell is changed by a sensory sequence and that this pattern instructs the replicating RNA. The RNA then directs the synthesis of protein which is coded according to the position of bases in the template molecule. The coded protein then dissociates upon the appropriate stimulus and provides a part of the molecule which interacts with a complementary molecule in a kind of an immunologic response. The consequence of this reaction is the release of a transmitter substance across the synaptic membrane and so along an entire neuronal chain.

It has previously been made clear that affect determines both storage and retrieval of memories and that lesions in the affect system result in profound memory loss. Such affect (pain, pleasure, rage, fear) is neurohumorally mediated by the biogenic amines, substances like epinephrine and norepinephrine. The initial processing neurons in subcortical structures are heavily loaded with these amines, particularly epinephrine and norepinephrine.

It is intriguing to hypothesize that they act as haptenes by linking with certain protein configurations producing a kind of antigen antibody response resulting in synaptic firing which imparts a specific affective tone to a sensory experience perhaps, determining where it will be stored.

* * *

AT THIS POINT memory can now be related to thinking, habituation and novelty, utilizing Pribram's[16] match-mismatch theory of thought. According to Pribram, "thought is a process of active uncertainty produced when an ordered set of memories mismatches the current novelties of the situation." Sensory input, of course, becomes novel when it necessitates organismic alerting as measured by electrocortical arousal.

This simply means that something is new or different and must be appraised or scanned, perhaps, on an affective spectrum of reward or punishment, pain or pleasure. Alerting can be measured in a number of ways. They include low amplitude, fast activity on the EEG, vasoconstriction of the peripheral vessels or increase in the tension of certain muscles. With implanted animals hypersynchrony of the record obtained from the hippocampus is a characteristic alerting pattern.

When a signal is repeated over a sufficiently long period of time unassociated with threatening events these alerting patterns gradually diminish and finally die away.[17] A representation of the signal has been laid down in the brain and its neutral affective significance determined. As long as the current signal continues to match this central representation alerting no longer occurs and habituation is said to have taken place.

Change the signal just a bit, a mismatch results and the entire alerting pattern is resumed.

Pribram considered thought to be a process of active uncertainty in which an attempt is made to assess current sensory input by comparing it to the stored past along a reward punishment continuum.

Remember that the mnestic circuit and the affect system are intimately related and that early in the course of evolution, they served the function of olfaction or odor scanning. In lower forms smells were evaluated in terms of their approach or avoidance meaning. Smells which came to be centrally represented as satisfying certain drive states evoked approach behavior. Those odors which were centrally coded in an aversive category aroused the animal to fight or flight responses. Repeated sniffing reflected uncertainty and the need to create a match between the smell and a central code before the animal could relax.

* * *

THE BEHAVIOR of man is very much more complex but his memories can also be categorized as pleasurable and painful. His symbolic process has enabled him, however, to delay his motor behavior to look far ahead into the future and to make infinitely more varied and intricate categories.

This has allowed him to create and to build his remarkable civilization, but has also enormously augmented his power of destruction and possibly his potential for mental illness.

It is disturbing to reduce the ineffable substance of man, his sometimes vile, sometimes magnificent history to a series of biochemical reactions in the microscopic recesses of his brain. D. H. Lawrence would scream out protestingly in his grave were he aware of this reductionistic, mechanistic, dehumanizing of man.

Yet the continued investigation of how the brain works may eventually provide us with techniques for altering human behavior not presently imaginable.

How man utilizes them is quite another matter.

REFERENCES

1. Lettvin, J. Y., Maturana, H. R., McCullough, W. S., Pitts, W. H., What The Frog's Eye Tells the Frog's Brain, Proceedings of Institute of Radio Engineers, 47, pp. 1940-1951, 1959.
2. Jung, C. G. The Integration of the Personality, Routledge & Kegan Paul, Ltd., London, 1940.
3. London, J., Before Adam. New York, MacMillan, 1907.
4. Head, H., Aphasia and Kindred Disorders of Speech. Vols. 1 and 2. Cambridge University Press, 1926.
5. Lashley, K., The Effect of Strychnine and Caffeine upon Rate of Learning, Psychobiol. 1:14 1-170, 1917.
6. Penfield, W. G. and Rasmussen, T., The Cerebral Cortex of Man. New York, MacMillan Co., 1952.
7. Whitty, C. W., and Lewin, W., A Korsakoff Syndrome in the Post Cingulectomy Confusional State. Brain, 83, 648-653, 1960.
8. Hyden, H., Biochemical Aspects of Brain Activity in Farber, S. M. and Wilson, R. H., Symposium, Man and Civilization: Control of the Mind, McGraw Hill, New York, 1961.
9. McConnell, J. V., A. L. Jacobson and D. P. Kimble. The Effects of Regeneration upon Retention of a Conditioned Response in the Planarian. J. Comp. Physiol. Psychol. 52:1-5, 1959.
10. Corning, W. C. and John, E. R., The Effects of Ribonuclease on Retention of Conditioned Response in Regenerated Planarian, Science, 134: 1363-1365, 1961.
11. McConnell, J. R. Memory Transfer Through Cannibalism in Planarians. J. Neuropsychiat. 3(Suppl. No. 1): S42-S48, 1962.
12. Brattgard, S. O., The Importance of Adequate Stimulation for the Chemical Composition of Retinal Ganglion Cells during Early Postnatal Development. Acta Radiol. Suppl., 96:1952.
13. Cameron, E. D., The Process of Remembering, Brit. Journ. of Psychiat., Vol., 109, 1963.
14. Hyden, H. and Pigon, A., A Cytophysiological Study of the Functional Relationship between Oligodendroglial Cells and Nerve Cells of Deiters Nucleus, J. Neurochem., 6:57-72, August, 1960.
15. Poschel, B. P. H. Proactive and Retroactive Effects of Electroconvulsive Shock on Approach Avoidance Conflict, J. Comp. Physiol. Psychol., 50:392-396, 1957.
16. Pribram, K. H., The New Neurology: Memory, Novelty, Thought, and Choice in Glaser, G., EEG and Behavior, Basic Books, Inc., New York, 1962.
17. Sokolov, E. N., Neuronal Models and the Orienting Reflex in Brazier, M.A.B. (ed) The Central Nervous System and Behavior, Trans. Third Conf. Josiah Macy, Jr. Foundation, New York, 1960, pp. 187-276.

BOOKS RECEIVED

New Hope for Your Skin. By Irwin I. Lubowe. 264 p.p., illustrated. $.75. Pocket Books, Inc., New York, 1966. (First edition published by E. P. Dutton in 1963.)

Your Heart Has 9 Lives. By Alton Blakeslee and Jeremiah Stamler. 278 p.p. $.75. Pocket Books, Inc., New York, 1966. (First edition published by Prentice-Hall in 1963.)

Radiographic Atlas of the Genitourinary System. By Charles Ney and Richard Friedenberg (and contributing authors). 741 p.p., illustrated. No price indicated. J. B. Lippincott Company, Philadelphia and Toronto, 1966.

ADVICE FOR CONTRIBUTORS

1. Address scientific manuscripts to the Publication Committee, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan.

2. Submit original, double-spaced typewritten copy and one carbon copy on letter size (8½ x 11 inch) paper.

3. On page one, include title, authors, degrees, academic titles, and any institutional or other credits.

4. Authors are responsible for all statements, methods, and conclusions. These may or may not be in harmony with the views of the Editorial Staff. It is hoped that authors may have as wide a latitude as space available and general policy will permit. The Publication Committee expressly reserves the right to alter or reject any manuscript, or any contribution, whether solicited or not.

5. Illustrations should be submitted in the form of glossy prints or original sketches from which cuts, or plates, will be made by MICHIGAN MEDICINE. MICHIGAN MEDICINE will pay the first $25 of the engraving bill, and the author shall pay the balance. An estimate of the cost will be submitted to authors before cuts are ordered.

6. References will ordinarily be limited to seven in number. Exceptions may occasionally be made.

7. Contributors will be notified as soon as practical if a manuscript is accepted for publication. Unused manuscripts will be returned. Every care will be taken with the submitted material but the Journal will not hold itself responsible for loss or damage to manuscripts.

8. Articles should ordinarily be less than four printed pages in length (3000 words).

9. References should conform to *Cumulative Index Medicus,* including, in order: Author, title, journal, volume number, page, and year. Book references should include editors, edition, publisher, and place of publication, as well.

10. Specify address to which galley proofs should be sent. Proofs will be mailed to authors for correction before publication and should be returned to the editor in 48 hours. If proofs approved by the author are not received by the editor prior to deadline, publication of the article will be cancelled for that issue.

11. The editors welcome, and will consider for publication, letters containing information of interest to Michigan physicians, or presenting constructive comment on current controversial issues. News items and notes are welcome.

12. It is understood that material is submitted for exclusive publication in MICHIGAN MEDICINE.

ORIGINAL SCIENTIFIC ARTICLE

Sex Education of the Adolescent: How? Where? When?

By Paul R. Patterson, M.D.
Albany, N.Y.

Our present generation of parents in contrast to the previous generations are enlightened on the need to provide sex education to children. In fact many mothers will have read books and pamphlets on how to give the "facts of life" to her child even before the child is three years of age. From there on she waits for the child's first request for sexual information.

> *We find that some of the "intellectual mothers" will teach the children the anatomical parts of their bodies in the most scientific terms available in order to display their openmindedness about sex. More frequently than not this is a reflection of the anxiety of the parents and not their freedom from concern.*

Before the sex drive begins to manifest itself more intently in the adolescent period, very few children have any real concern or emotional disturbances from their lack of sexual knowledge. Actually a small child could go through the lower grades of school without knowing any facts of life and still mature normally. Nevertheless, most parents are more concerned about giving anatomical and physiological knowledge to the developing child than they are to discuss the emotions, tensions and drives connected with sex as their child enters the door of adolescence.

* * *

PARENTS AND SCHOOLS feel proud of themselves when they have presented a biological film or charts to the student bodies assuming they have fulfilled the cultural duty to the next generation. It is not ignorance of anatomy that causes confusion to the young adolescent. It is the ignorance of the emotional significance and meaning of his sex drive.

The adolescent rarely, if ever, receives any frank discussion either singly or in groups about the emotions, tensions or even the scientific basis or morality. In contrast, he may receive derogatory education regarding wicked thoughts from his clergyman and society in general.

> *It is unfortunate that the majority of religious individuals have the idea that sex and sin are synonymous. It is reasonable to expect that the young healthy adolescent with his developing sex drive will have sexual thoughts about which he will be made to feel guilty. Perhaps this is one reason why the teenager does not wish to attend church.*

In the past churches have opposed sex education in the schools and many have taken a stand that sex education truly belongs in the home. The average mother does a marvelous job of sex education to her daughter. The average father does a most miserable job. The average man has so much tension and anxiety about sex that he is unable to permit himself to be exposed psychologically in discussing this emotionally ladened topic with his son.

* * *

NOW SOME CHURCHES are actually sponsoring weekly sessions on "boy meets girl" and general sex education either within the confines of the church or in some weekend retreat. This is to be commended.

Studies have shown that the adolescent who is a regular church goer and does not come from a broken or divorced home and where the parents are able to display affection before their children, do not become involved in premarital sexual intercourse nearly as frequently as those who do not have these advantages.

* * *

A MOST SIGNIFICANT fact that the public should appreciate is that the youth are maturing at a much earlier age today than they did in previous generations. For every decade since 1850 girls have been menstruating from 4 to 6 months earlier. The average age of menstruation before 1850 was over 17 years of age. Today in many parts of the country the average age is 11. It is

---

Doctor Patterson is Professor and Chairman, Department of Pediatrics, Albany Medical College, Albany, N.Y. The paper represents excerpts from a discussion presented at the University of Michigan Medical Center Postgraduate Course for Adolescent Medicine.

quite normal to find girls menstruating at 10, 9 and even 8 years of age.

This has considerable hormonal and resulting emotional overtones. An example of a mother and daughter might be given. If a woman began menstruating at 14 and had been menstruating for six years, she would be 20 years of age with all the emotions and desires of a 20-year-old woman. If her daughter began menstruating at 10 years of age, in six years she would be having these emotions of a 20-year-old woman at 16 years of age. One must keep this knowledge in mind before they condemn the adolescent behavior.

The Kinsey Report[1] has confirmed what many men can remember; namely, the peak of the sex drive in the male is not in the 20's and 30's but at the 15-year-old age period. With all of this knowledge we still avoid discussing sex and the adjustment concerned with the adolescent.

The average adolescent knows much more about the mechanics of sex than most of their parents realize. When I hold mixed group discussion with teen-agers, I will ask the parents to come and sit in during the first hour at the rear of the room. During these sessions I will ask the teen-agers how many of them know what birth control means, what is a condom, what is a diaphragm, what are birth control pills, etc., and have them raise their hands if they do know.

* * *

THE PARENTS ARE astonished when they find that 100 per cent of the youths raise their hands. In fact it is quite amusing to find parents jumping out of their seats to look at their son or daughter to see whether his hand is raised and then to look at each other in utter amazement.

It is during these intimate sessions that one quickly learns that their general information is quite vast. Upon the other hand, it is quite apparent that they do not understand themselves. It is this confusion that they feel inwardly that interferes with their heterosexual adjustment. Many will confide that they are actually frightened by some of the thoughts they have.

On the other hand there are those who are disturbed because they do not have as strong a sex feeling as they believe their contemporaries have. Homosexuality is often discussed among the high school students as if it were as common as heterosexual activities.

It is not true homosexual experiences that they discuss but the very frequent use of this label as applied to others. (When one looks at the long hairdo on many of these boys, one gets the feeling that these boys are not quite sure themselves whether they want to be boys or girls.)

Sexual fantasy can be an escape from the pressures of the world as well as the sexual tensions being a means of expression of underlying anxiety. With the overemphasis on scholastic achievement and going to college, there is undoubtedly an increase in the sense of failure and rejection by the students who are not doing satisfactorily academically. This undoubtedly contributes to the confusion of the adolescent.

* * *

THERE IS GREATER instability in our homes today. The national statistics disclose that one out of every four families move yearly and that one out of very four mothers are working. Coming home to an empty house can contribute to this sense of loneliness and the need for affection and attention in the adolescent. While the sex drive makes the male quite restless, the sex drive makes the girl have a sense of loneliness. These two causes of loneliness may become confused.

This is a pseudo-romantic age with parents encouraging their children to date at 13, going steady at 14 and adult movies stressing sexual romance. While girls are in love with love, boys are in love with sex. The physiological responses that God apparently gave the two sexes are toyed with without good understanding. The boy uses love to get sex and the girl uses sex to get love.

The education of the adolescent in sexual matters therefore requires a general discussion of life adjustment, the purpose of morality, the need for religion and the avoidance of hurting others. Since there may be different degrees of maturity, it is best to organize group sessions of teen-agers who are 16 years and older with no hesitancy in having the sexes together in the discussions.

I have found it an advantage to have more than one session and to break up into small groups as one would do in a workshop to discuss emotionally laden items.

* * *

FOR EXAMPLE ONE item that comes up constantly is the question regarding birth control. The young mind asks if a birth control pill or injection is developed so that one need not worry about becoming pregnant.

Is there any need to worry about avoiding sexual relations before marriage inasmuch as no one will be hurt?

Who determines morals, the minister or women?

Will I be mentally healthier if I marry early while still in college?

Is petting dangerous to the body?

Physicians should be willing to talk with PTA groups where most of the parents will be, namely, in the grade schools. It is difficult to get parents of high school students out to hear any discussion about their chil-

dren. With the talks about sex education to the grade school parents, the adolescent period should be stressed more than the early ages.

In discussing sex education to these parents the most crucial aspect of sex education should be discussed in detail. This is the real identification of the boy and girl. The little girls have to learn how to be women, and the little boys have to learn how to be men. The main uncomfortableness that the adolescent feels is the lack of security with his own sex. The boy has to be taught how to feel masculine. The girl has less difficulty in feeling feminine in our culture than the boy in feeling his masculinity.

Our culture needs greater symbols to be offered to the maturing boy that he can accept as being masculine without the sense of insecurity. Stronger fathers who are emotionally stable and not afraid to discuss the problems of sex with the boys are needed in the homes.

When we as physicians speak to parent groups on sex, we need to stress more the problems of erections, masturbation and lack of masculine security in the male without feeling vulgar about it. Somehow the public will accept a discussion of sex pertaining to girls and their problems before they will on the strong sex drive and the associated problems in the male.

One should bear in mind that on an average there are 240,000 marriages in this country during the month of June. Sadly there will be approximately 60,000 divorces before the end of the year, namely, one divorce for every four marriages. Many of these weddings are forced marriages because of pregnancy. These are the so-called "shot gun" weddings where the unborn child has no weapon to defend himself! The clergy should hesitate to marry a pregnant girl. However, it is estimated 25 to 50 per cent of all brides are pregnant at the time of marriage. Probably 100 per cent of 16 year old brides are "child with child." No wonder the bride blushes!

To be realistic about sex requires courage. The clergy and physicians should interchange their information and derive a positive morality to give our youth instead of the negative morality of don't, don't, don't.

REFERENCE

1. Kinsey, A. C.; Pomeroy, W. D. and Martin, C. C. *Sexual Behavior in the Human Male.* W. B. Saunders Company, Philadelphia, 1948.

AMA VIEWS ON BIRTH CONTROL INFO FOR WELFARE PATIENTS

Many women who desperately want and need birth control information often cannot get it — simply because welfare agencies refuse to provide this service.

This indictment of "second-class medical care" for welfare patients is contained in a signed editorial in a recent issue of the *Journal of the American Medical Association.* The editorial was prepared and signed by John C. Ballin, Ph.D., secretary to the AMA Committee on Human Reproduction.

"Women able to afford a private physician can get adequate information on methods of fertility control as well as the actual contraceptive supplies. They assume the right to these services as part of first-rate medical care," Dr. Ballin writes.

"Yet, the indigent woman who must go to public health and welfare agencies is all too often discriminated against by being denied these services which she so resperately needs and wants. This is second-class medical care at best."

There are several reasons, says Dr. Ballin.

In some cases, birth control services are prohibited in tax-supported health facilities by statute, or are omitted from the programs.

In other cases, physicians and public health officials lack the courage to break an unwritten rule against mentioning birth control.

"Whatever the cause," writes Dr. Ballin, "the net result is that impoverished women continue to have babies that they do not want and cannot support, either phychologically or financially."

All over the world, individuals and groups have endorsed the principle or responsible parenthood, Dr. Ballin points out. In 1964 the AMA House of Delegates stated that "An intelligent recognition of the problems that relate to human reproduction, including the need for population control, is more than a matter or responsible parenthood; it is a matter of responsible medical practice.

The AMA also has stated as a matter of official policy that "the prescription of child-spacing measures should be made available to all patients who require them, consistent with their creed and mores, whether they obtain their medical care through private physicians or tax- or community-supported health services."

Most major legal barriers to dissemination of birth control information have now been removed in this country, Dr. Ballin notes. A 1965 decision of the U.S. Supreme Court declared unconstitutional a Connecticut ban on the use of contraceptives. In May of this year the Massachusetts legislature repealed a state law prohibiting the sale or dissemination of information on contraceptives.

ORIGINAL SCIENTIFIC ARTICLE

Early Strategies In the Treatment of the Alcoholic

By Jose' J. Llinas, M.D.
East Lansing

What we know for certain about the causes of alcoholism would provide enough lines for a short paragraph. What we do not know, as the most cursory review of the literature shows,[1, 2] could fill volumes.

Fortunately, we have accumulated much clinical knowledge about many aspects of the problem, and if we use what we know, we can manage an alcoholic patient in a rational and helpful manner. Our understanding derives not only from experience with people who drink to excess, but also from treatment of other addictions, and many other psychiatric conditions.[3]

Basic Principles

There are many different approaches to the treatment of alcoholism, even when we limit ourselves to the psychotherapy aspects.

Whatever theory of treatment one subscribes to, the basic principles should be clear in the doctor's mind. At the present state of our knowledge, many doctors feel that alcoholism is a psychiatric disorder, which can be understood and dealt with primarily in psychodynamic terms.

There are sociological, genetic, biochemical and other factors involved,[4, 5] but the degree of relevancy of such factors for the practicing clinician at this point in time is very limited. More useful knowledge at the present time is that which has to do with:

(1). Feelings and conflicts of the alcoholic.
and
(2). Feelings and conflicts of the physician.

Feelings and Conflicts of the Alcoholic

Whether acute or chronic, "essential," reactive or symptomatic, alcoholism always or nearly always comes to the attention of the physician in the form of a *life crisis.* The patient gets drunk and is picked up by the police; the patient beats up his wife; the patient goes into alcoholic coma; the patient is threatened with the loss of his job, his wife, custody of his children, or any number of events of this type.

Occasionally, very occasionally, does one see the patient during a sober period, but even then a life crisis of some sort is present in the background. He met a nice girl and wonders if he can "kick the habit," and get married; or perhaps he feels his life is empty and void of meaning; he is very unhappy about the consequences of his drinking, etc.

In our experience at a Mental Health Clinic, however, most patients come in under pressure from somebody else.

Sensitive People

A composite picture of the kind of patient we see will come out something like this: The patient is usually a man, above the age of 30. We have seen few women patients, some possible explanations for this are available in the literature.[3] The patient appears somewhat aloof and hard to relate to. Yet one has a strong feeling that underneath his superficial and sort of unconcerned attitude, he is very frightened.

He is so used to relying on wishful thinking and a peculiarly slanted view of the world that it would be hard for him to recognize his fear, were one to point it out to him. Most patients, how-

---

Doctor Llinas is assistant professor of medicine (psychiatry), Michigan State University College of Human Medicine.

This paper was presented to the Physicians Seminar, Summer School of Alcohol Studies, Rutgers University and parts of it have appeared in Canada's Mental Health and The Journal of Hospital and Community Psychiatry.

ever, will sooner or later respond to a comment that they "seem to be very sensitive."

"I don't know you very well yet, but I have an idea that your feelings are easily hurt, isn't that so?"

He is indeed sensitive, many times hyper-alert, even suspicious. It is not difficult for him to detect slights and rejections, even in the most common procedural steps followed in doctors' offices or clinics.

Chafetz reports that he had to discontinue the use of psychological tests in the alcohol clinic at the Massachusetts General Hospital because patients could not tolerate them early in their contacts.

The patient's ability to wait, to plan for the future, to relate to the doctor without undue submission, fear, or contempt, is severely limited.

Though his inner expectations are really very great, he is at the same time convinced that nobody cares what happens to him.

Denial of Reality

Because of his low self-esteem he not only distorts reality, but he blames others for his troubles. As Chafetz says, he *"has no problems," "Drinks a little." "Can stop anytime."*[3]

Many patients declare blandly that they "don't even like the taste of it," or that if this or that happened in their lives, they would surely stop drinking. "I know I wouldn't be drinking today if my mother was alive," a patient said, "she was so set against drinking."

Another patient, confronted with the fact that he came home every night, drank eight or ten bottles of beer and did not eat with his family, said resentfully, "Well, Doc, I come home after a hard day's work, then fix up the yard and do other things around the house—don't I have a right to relax a little and enjoy myself?"

Lurking behind feeble excuses of this sort is the fact that the patient really feels *wronged,* and that this somehow gives him a special right or privilege. How dare the wife, the children, the doctor, or even society at large, interfere with his rights?

A single patient who had been admitted to a State Hospital three times in a six-month period, commented defensively that "other people had a wife and children, but me, I have nobody."

Another, referred by the Juvenile Court after losing custody of his children, declared that he drank because the pain in his legs from varicose veins was unbearable. He could not be operated on because he had no insurance, and he had no insurance because he had no steady employment. And so on.

Pitfalls in Early Management

The most common pitfall when one is faced with this type of defense is to react to it wtih feelings of anger, disappointment or contempt. One should remember that, by and large, the patient is not really aware of what he is doing. It is an automatic, unconscious self-protection reflex. Even when a patient openly lies, he is, to some extent, trying to handle reality as if he had a magic wand; he *says* he doesn't drink, and that *makes* it so.

The second most common mistake is to challenge this defense too soon, making the patient angry. The third most common mistake is not to challenge the denial of the problem at all.

How shall one then proceed? The best course of action most of the time is to take a careful, complete and methodic life history of the patient, beginning usually with his present situation and going back in time.

What are his present life circumstances? What is his present family like? Perhaps from there, what was his original family like? What sort of childhood did he have? Where was he born? What did his father do for a living?

In the process, one can tactfully and indirectly at first, confront the patient with subtle contradictions and distortions.

If he has had sixteen jobs in the last two years, one can begin to wonder with him if it has really been a matter of bad luck or whether it is really true that foremen do not like him. Marital and social adjustment, degree of self centeredness in his dealings with other people, amount of self punishment in his behavior, are all useful areas to ex-

Summary — The alcoholic patient usually shows basic personality defects, and a peculiar way of protecting himself from a realistic awareness of his difficulties. The doctor's psychological skill in understanding what the patient is doing is an important positive asset in treatment, particularly in the early contacts.

Not only is it necessary to consider the feelings and conflicts of the alcoholic, and try to resolve them; the physician needs also some insight into his own feelings and conflicts as he tries to help the alcoholic.

amine. A search for positive elements in the patient's life history should never be forgotten. Sometimes it might make the difference between his staying in treatment or dropping out.

If his family life was not very satisfactory, was there somebody else who liked him? A teacher, perhaps, or a minister? Was he good at baseball? Did he have a pet? Does he have any special abilities or interests?

When one can, after awhile, reflect back to the patient what he has said, he is more likely to accept the "bad" with the "good," and begin to face his problems.

Inability To Set Limits

One important need of the alcoholic patient early in treatment, something which is true of all psychiatric patients, but perhaps more crucial with him, is to make it crystal clear what is expected of him.

What does the doctor want him to do?

In an article published in 1961, Robert A. Moore[6] mentions that when the doctor is not firm and direct in exercising a degree of control of the patient's behavior, the alcoholic is apt to interpret this as lack of interest or as proof that the doctor doesn't really care.

One important question here is that of abstinence. Should the patient be allowed to drink at all?

While sobriety is always a desirable goal, Moore and Krystal, among others, have stated that this decision has to be highly individualized.[7, 8]

> A 30-year-old single Korean War veteran was seen with the chief complaints of excessive drinking, extreme shyness, a tendency to blush in public if somebody looked at him, and a fear to eat in restaurants. History showed that he had been discharged from the Service after an acute schizophrenic break, and had managed to function only marginally. For the last two years he had driven a taxi during the day, and drank anywhere from four to eight bottles of beer every night. This occasionally interfered with his getting to work on time. At the end of the first interview it was suggested to the patient that he should cut down in the amount of beer, but that it would be unwise for him to stop drinking altogether. He said with great relief that this was the first time a psychiatrist had ever told him it was alright to drink. This obvious, but necessary misrepresentation of the psychiatrist's words, was never challenged in many months of out-patient supportive psychotherapy of his psychotic condition.

Author
Jose' J. Llinas, M.D.

When the drinking has openly harmful or self-destructive implications, total abstinence is asked from the outset.

> A 32-year-old married machinist came to the clinic with a problem of uncontrollable temper. The previous week, after drinking two shots of whiskey, he had "spanked" his four-year-old daughter, and the child had sustained a fractured rib. The patient appeared depressed and remorseful, and agreed readily that he would stop drinking altogether as a basic condition of treatment.

The Doctor's Conflicts and Feelings

From the doctor's standpoint, failure to understand one's own feelings is perhaps the most serious obstacle to successful treatment.

"At various times," Menninger wrote in the preface to Wallerstein's book, "Alcoholic addiction has been regarded as a manifestation of ignorance, of vice, of sinfulness and of disease, or of all of these combined."[9]

Being only human beings, at one time or another, doctors have shared feelings of this sort. Furthermore, one of the gratifying things about being a physician is to be able to see one's patients do well.

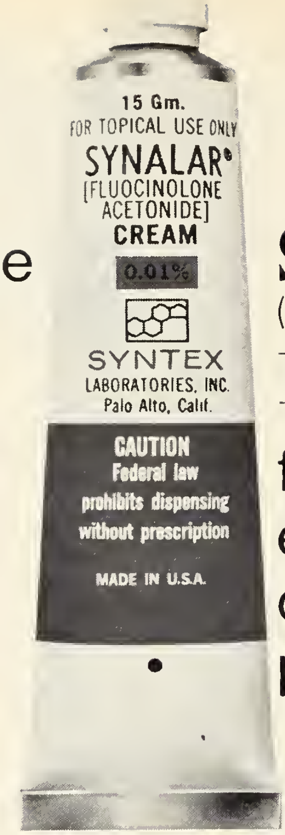
The doctor who works with alcoholics has many times to limit his goals, and be content measuring progress in terms of inches rather than miles. A reduction in the number of drinking bouts, the ability to hang on to a job, the development of a less quarrelsome disposition, a slightly more hopeful outlook on life, these and other minor victories take days, months, sometimes years.

As a doctor, he should be aware that, as many psychiatrists have pointed out, alcoholism *is not a simple neurosis.*

From a diagnostic standpoint, it is a much more serious problem, and it indicates a degree of personality illness in some ways alike to the patient who suffers from schizophrenia, or those grossly immature persons who are described as "character disorders." Some personality traits of obese people, who find it very difficult to lose weight, and deny that they ever eat too much, are strikingly similar.

(Continued on Page 979)

new small size



Synalar® 0.01%

(fluocinolone acetonide) **cream**

15 Gm.

for even greater economy in office or hospital practice

the superiority topical with the

Now you can prescribe as little or as much Synalar Cream 0.01% as is needed for a particular therapeutic problem in a size that permits the greatest economy for your patient. The new 15 Gm. tube, for example, is best suited for short-term therapy and for small sites. For more extensive body areas prescribe the 45 Gm. tube—a size that's also ideal for your treatment table. And the 120 Gm. jar is most economical for hospital use. Thus, with Synalar Cream 0.01%, you have the superiority of a modern topical corticosteroid shown to be more effective than 1% hydrocortisone[1-3] plus the economy that makes therapy practical for use in more dermatologic conditions, in long-term maintenance, with occlusive dressings in resistant cases, and in extensive area involvement.

Contraindications: Tuberculous, fungal, and most viral lesions of the skin (including herpes simplex, vaccinia, and varicella). Not for ophthalmic use. Contraindicated in individuals with a history of hypersensitivity to any of its components. **Precautions:** 1. *General*—Synalar Cream 0.01% is virtually nonsensitizing and nonirritating. Where severe local infection or systemic infection exists, the use of systemic antibiotics should be considered, based on susceptibility testing. While topical steroids have not been reported to have an adverse effect on pregnancy, the safety of their use on pregnant females has not absolutely been established. Therefore, they should not be used extensively on pregnant patients, in large amounts, or for prolonged periods of time. 2. *Occlusive dressing method*—With occlusion of extensive areas, systemic absorption of the corticosteroid may occur, and suitable precautions should be taken. Occasional patients may show contact sensitivity to a particular dressing material or adhesive. Miliaria, folliculitis, or pyodermas have been seen infrequently with the use of this technique. The development of infection requires appropriate antibacterial therapy and discontinuation of the occlusive dressing method. Local atrophy and striae have been reported with protracted occlusive dressing therapy. While lesion relapses can be expected to occur in many psoriatic patients, remissions may persist for several weeks to several months in favorable cases. The patient whose psoriasis is in an active stage, with recent appearance of new lesions, may not be a good candidate and may show early relapse. Some plastic films may be flammable, and due care should be exercised in their use. Similarly, caution should be employed when such films are used on or left near children to avoid the possibility of accidental suffocation. **Side Effects:** Side effects are not ordinarily encountered with topically applied corticosteroids. As with all drugs, however, a few patients may react unfavorably to Synalar under certain conditions. **References:** 1. Cahn, M. M., and Levy, E. J.: J New Drugs 1:262 (Nov.-Dec.) 1961. 2. Meenan, F. O.: J Irish Med Ass 52:75 (Mar.) 1963. 3. Robinson, H. M., Jr., Raskin, J., and Dunseath, W. J. R.: Southern Med J 56:797 (Jul.) 1963.

of a modern
corticosteroid
economy of
hydrocortisone

Now...a choice of 3
economical sizes

SYNALAR
SYNALAR
CREAM
SYNTEX

120 Gm. jar 15 Gm. tube 45 Gm. tube

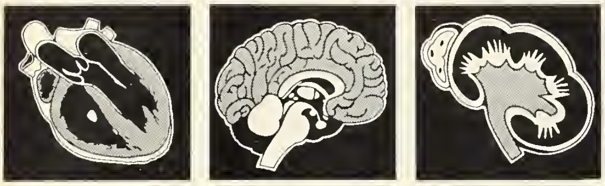
fluocinolone acetonide — an original steroid from
SYNTEX
LABORATORIES INC., PALO ALTO, CALIF.

SQUIBB NOTES ON THERAPY

Behind continued high blood pressure readings lies the possibility of organic damage[1-13]

MANY OF THE aspects of essential hypertension are unpredictable—either because there are a number of mechanisms involved or because individuals differ in their responses to these mechanisms.[1]

There is one aspect of hypertension, however, that seems, in many cases, predictable. ". . . when the blood pressure is elevated to a marked degree for an adequate period of time, this in itself leads to perpetuation of the syndrome with resulting vascular damage throughout the body."[14] All too often the disease progresses until there is damage to one of three vital organs: the heart, the kidney, the brain.



> "Hypertension is certainly a major factor in the genesis of coronary heart disease, and it is even more important when compounded with obesity."[4]
>
> "[Vascular deterioration] can be clearly seen in the kidney with a degree of damage that can be measured by renal function studies."[10]

". . . most evidence suggests that reduction of blood pressure, when it is too high, not only relieves the heart of excess work but reduces vascular damage."[1]

"In short, treatment is indicated."[1]

Antihypertensive therapy will not restore the blood vessels to normal. Yet many of the vascular changes and symptoms caused by increased blood pressure may be arrested or alleviated when the blood pressure is reduced to normotensive levels.[7]

Reducing the blood pressure helps curtail further vascular damage and improves the prognosis — when damage is not too far advanced before therapy is started.[14] Essential hypertension is an indication not only for treatment, but for *early* and adequate treatment of the patient in question.

Reduce the blood pressure with Rautrax-N

Rautrax-N combines the antihypertensive-tranquilizing action of whole root rauwolfia with the antihypertensive-diuretic action of bendroflumethiazide in one convenient medication. The two drugs complement each other so that smaller doses of both are possible.

Rauwolfia combined with bendroflumethiazide is particularly effective in long-term therapy,[15-17] since beneficial effects do not diminish with continuous daily administration.

For most patients 1 or 2 Rautrax-N tablets daily are sufficient for maintenance therapy. The simplicity, convenience and economy of such a dosage schedule are of particular benefit to older patients.

References: **1.** Page, I. H., and Dustan, H. P.: The Usefulness of Drugs in the Treatment of Hypertension, in Ingelfinger, F. J.; Relman, A. S., and Finland, M.: Controversy in Internal Medicine, Philadelphia, W. B. Saunders Co., 1966, p. 95. **2.** Hollander, W.: The Evaluation of Antihypertensive Therapy of Essential Hypertension in Ingelfinger, F. J.; Relman, A. S., and Finland, M.: Controversy in Internal Medicine, Philadelphia, W. B. Saunders Co., 1966, p. 97. **3.** Nickerson, M.: Antihypertensive Agents and the Drug Therapy of Hypertension, in Goodman, L. S., and Gilman, A.: The Pharmacological Basis of Therapeutics, ed. 3, New York, The Macmillan Co., 1965, p. 727. **4.** Berkson, D. M.: Indust. Med. & Surg. **32**:371, 1963. **5.** Cohen, B. M.: M. Times **91**:645, 1963. **6.** Lee, R. E., et al.: Am. J. Cardiol. **11**:738, 1963. **7.** Moyer, J. H.: Am. J. Cardiol. **9**:821, 1962. **8.** Moser, M.: New York J. Med. **62**:1177, 1962. **9.** Wood, J. E., and Battey, L. L.: Am. J. Cardiol. **9**:675, 1962. **10.** Moyer, J. H., and Heider, C.: Am. J. Cardiol. **9**:920, 1962. **11.** Moser, M., and Macaulay, A. I.: New York State J. Med. **60**:2679, 1960. **12.** Judson, W. E.: Nebraska M. J. **44**:305, 1959. **13.** Hodge, J. V.; McQueen, E. G., and Smirk, H.: Brit. M. J. **1**:5218, 1961. **14.** Moyer, J. H., and Brest, A. N.: Hypertension Recent Advances, Philadelphia, Lea & Febiger, 1961, p. 633. **15.** Berry, R. L., and Bray, H. P.: J. Am. Geriatrics Soc. **10**:516, 1962. **16.** Reid, W. J.: J. Am. Geriatrics Soc. **13**:365, 1965. **17.** Feldman, L. H.: North Carolina M. J. **23**:248, 1962.

Contraindications: Severe renal impairment or previous hypersensitivity. **Warning:** Ulcerative small bowel lesions have occurred with potassium-containing thiazide preparations or with enteric-coated potassium salts supplementally. Stop medication if abdominal pain, distension, nausea, vomiting or G.I. bleeding occur.

Precautions and Side Effects: The dose of ganglionic blocking agents, veratrum or hydralazine when used concomitantly must be reduced by at least 50% to avoid orthostatic hypotension. Caution is indicated in patients with depression, suicidal tendencies, peptic ulcer; electrolyte disturbances are possible in cirrhotic or digitalized patients. Marked hypotension during surgery is possible; consider discontinuing two weeks prior to elective surgery and observe patients closely during emergency surgery. Rauwolfia preparations may cause reversible extrapyramidal symptoms and emotional depression, diarrhea, weight gain, edema, drowsiness may occur. Bendroflumethiazide may cause increases in serum uric acid, unmask diabetes, increase glycemia and glycosuria in diabetic patients, and may cause hypochloremic alkalosis, hypokalemia; cramps, pruritus, paresthesias, rashes may occur.

Dosage and Supply: Initial dosage, 1 to 4 tablets daily, preferably at mealtime. Maintenance, 1 or 2 tablets daily. Rautrax-N is supplied as capsule-shaped tablets containing 50 mg. Rauwolfia serpentina whole root (Raudixin®), 4 mg. bendroflumethiazide (Naturetin®), 400 mg. potassium chloride.

Also available: Rautrax-N Modified — capsule-shaped tablets containing 50 mg. Rauwolfia serpentina whole root (Raudixin), 2 mg. bendroflumethiazide (Naturetin), 400 mg. potassium chloride. Both potencies available in bottles of 100. For full information, see Product Brief.

RAUTRAX®-N

Squibb Rauwolfia Serpentina Whole Root (50 mg.) with Bendroflumethiazide (4 mg.) and Potassium Chloride (400 mg.)

SQUIBB 'The Priceless Ingredient' of every product is the honor and integrity of its maker.

B. M. Harris, M.D., Chosen as 102nd President
--Report of Voting by Delegates--

The 102nd MSMS President will be Bradley M. Harris, M.D., Ypsilanti, who was chosen President-Elect September 27 by the House of Delegates. He will succeed C. Allen Payne, M.D., Grand Rapids, the 1966-67 President.

James J. Lightbody, M.D., Detroit, was re-elected Speaker of the House of Delegates for the eighth term, having served continuously in that office since 1960.

Again selected as Vice Speaker was Louis F. Hayes, M.D., Gaylord.

* * *

THE HOUSE OF Delegates re-elected the following Councilors: Ross V. Taylor, M.D., Jackson; Harvey C. Hansen, M.D., Battle Creek; Robert V. Daugharty, M.D., Cadillac; and Brooker L. Masters, M.D., Fremont. Newly-elected to the three-year term were Sidney Adler, M.D., Detroit, and John R. Franck, Jr., M.D., Wakefield. Harold Falls, M.D., Ann Arbor, was elected to fill the vacancy caused by the elevation of Doctor Harris.

Delegates to the AMA were elected as follows: Joseph A. Witter, M.D., Highland Park; Sidney Adler, M.D., Detroit; Donald N. Sweeny, Jr., M.D., Detroit; George W. Slagle, M.D., Battle Creek; and Otto K. Engelke, M.D., Ann Arbor.

Selected as Alternate Delegates were James C. Danforth, Jr., M.D., Detroit; Vernon V. Bass, M.D., Saginaw; John J. Coury, M.D., Port Huron; and Marjorie P. Meyers, M.D., Detroit, the first woman to be elected to the Michigan delegation.

* * *

THE COUNCIL ELECTED Robert J. Mason, M.D., Birmingham, Chairman at its organizational meeting. Doctor Mason replaces Harold H. Hiscock, M.D., Flint, Chairman for the past three years. Doctor Hiscock was not a candidate for re-election. Ross V. Taylor, M.D., Jackson, was elected Vice Chairman to succeed Doctor Mason in that office.

Re-elected as chairmen of Standing Committees were Robert K. Whiteley, M.D., Grosse Pointe, Finance, and Don Marshall, M.D., Kalamazoo, Education Liaison. New chairmen are Harold H. Hiscock, M.D., Flint, County Societies Committee, and Brooker L. Masters, M.D., Fremont, Publication Committee. Doctor Harris has served on The Council for 16 years.

"Delegates, it is my honor to introduce your new President-Elect, Bradley M. Harris, M.D., of Ypsilanti," declared C. Allen Payne, M.D., right, following the election of Doctor Harris, who was the only candidate nominated for the position. Doctor Payne will be succeeded next September at Grand Rapids by Doctor Harris.

The House of Delegates during the 1966 session took action on 77 resolutions in addition to the usual annual reports of committees and officers. The full House met in the ballroom of the Pantlind Hotel, while the reference committees worked in many smaller conference rooms.

Top Physician Award to Hyland Posthumously

William A. Hyland, M.D., Grand Rapids, was chosen Michigan's Outstanding Physician of the Year by the MSMS House of Delegates. Accepting the posthumous award for her husband, Mrs. Hyland received the citation from the House of Delegates on September 27. Doctor Hyland died July 18.

An active participant in professional affairs, Doctor Hyland served as MSMS President and Treasurer, a position he held for 14 years. Furthermore, Doctor Hyland was intimately involved with AMA activities.

The Outstanding Physician citation given Doctor Hyland reads:

"In recognition of his distinguished career in medicine, the church, in education, business and community service; and in appreciation for lasting contributions to his county, state and national medical associations.

"As Past President of the Kent County Medical Society in 1930 and of the Michigan State Medical Society in 1946, and as the longtime Treasurer of MSMS, Doctor Hyland served with distinction, dedication and dignity.

"As delegate to the American Medical Association and Chairman of the MSMS delegation he chairmanned several AMA committees and was responsible for the reorganization of the AMA headquarters administration in 1957.

"A highly respected surgeon in Grand Rapids and environs, Doctor Hyland received many awards in recognition of his many years of inspiring leadership on all levels of Cancer Society work.

"Because he lived many who would have been lost continue to contribute their full share to civilization's march."

Mrs. Wm. A. Hyland came to the House of Delegates to accept posthumously the "Michigan Outstanding Physician of the Year Award" from the MSMS House of Delegates. The House committee to Select the Outstanding Physician had selected the distinguished Doctor Hyland a month before his untimely death in July. The citation was presented by Speaker James J. Lightbody, M.D.

Leo Brown, second from left, Assistant to the Executive Vice-President of the AMA, shown here visiting with members of the House of Delegates and Council, spoke to the 1966 House of Delegates about AMA concerns and projects.

The Michigan State Medical Assistants Society gavel is passed along from Outgoing President Juanita Ferman, at far left, to Mrs. Alta Green, 1966-67 President; while two other top officials watch. Mrs. Dorothy Warner, third from left, is the new Vice President, and Mrs. Nelda Gasperson, far right, is the new President-Elect.

YPSILANTI WIFE NEW PRESIDENT OF AUXILIARY

The state Woman's Auxiliary activities for 1966-67 will be directed by Mrs. Henry Scovill, Ypsilanti. She was installed at the 1966 Convention to succeed Mrs. Rufus Reitzel of Mt. Clemens.

Mrs. W. G. Gamble, Bay City, was chosen as the new President-Elect. Also selected were Mrs. Earl W. Weston, Birmingham, First Vice President; Mrs. George Anthony, Flint, Second Vice President; Mrs. Edwin Galsterer, Saginaw, Recording Secretary; Mrs. Howard R. Williams, Ann Arbor, Corresponding Secretary; Mrs. Russell DeJong, Ann Arbor, Financial Secretary; and Mrs. Otto Engelke, Ann Arbor, Treasurer. Directors are: Mrs. C. J. Stringer, East Lansing, District II; Mrs. Robert E. Bloom, Muskegon, District IV; Mrs. Philip Wiley, Traverse City, District VII; and Mrs. Maurice D. Meier, Calumet, District VIII.

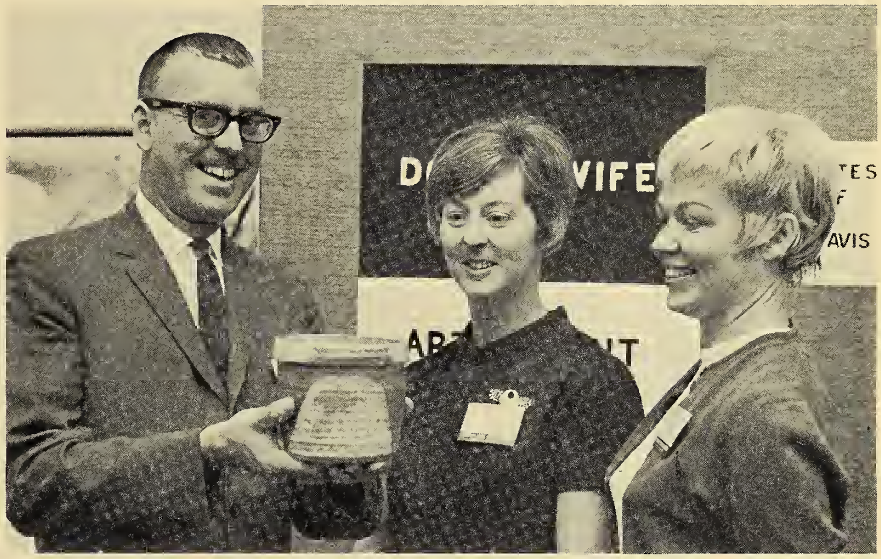
The state convention had many highlights, such as the Doctors' Day Luncheon, the address by National Auxiliary representative Mrs. William C. Scrivner, the many excellent reports, the clever skits, etc.

Kent Physicians Honor Firemen; Saluted in Return

Mutual esteem was recently shared in Grand Rapids between local physicians and firemen. Seventeen Grand Rapids firemen received honors from the Kent County Medical Society for their lifesaving efforts over the years.

In turn, the firemen presented Dale L. Kessler, M.D., Grand Rapids, President of the Kent County Medical Society, a plaque citing the physicians for a "job well done."

Yes, she'll have many miles to travel this coming year as the new State Auxiliary President. Mrs. Henry Scovill, left, of Ypsilanti, President for 1966-67, studies the Michigan map to locate the many local units with the help of the Outgoing President, Mrs. Rufus Reitzel, of Mt. Clemens.



R. J. Huebner, M.D., Hastings, entered the ceramics division of the Doctor-Wife Art Exhibit, and here shows his entry to two Exhibit viewers.

DOCTOR-WIFE
COURTESY OF PARKE DAVIS & CO.
ART EXHIBIT
'66

The "Doctor-Wife Art Exhibit" in the Exhibition Halls at the 1966 Annual Scientific Session was sponsored again by the state Woman's Auxiliary. The many works of art were viewed by the physicians, wives, medical assistants, and other guests at the Grand Rapids Civic Auditorium.

The oath of office is administered to President C. Allen Payne, M.D., Grand Rapids, by Harold H. Hiscock, M.D., center, Flint, Chairman of the MSMS Council, while Luther R. Leader, M.D., right, gets ready to put the ribbon and president's key over Doctor Payne's head — all during the Annual State Society Dinner Dance.

The 1966 House Of Delegates Proceedings Will Be Published With the December Issue Of Michigan Medicine

BELOW — Congratulations are exchanged by the MSMS Speaker and Vice Speaker, both re-elected by the delegates. James J. Lightbody, M.D., right, will begin his eighth year as Speaker, and Louis F. Hayes, M.D., Gaylord, will start his fourth year as Vice Speaker.

Mrs. Lenore Romney, wife of Governor Romney, was a featured speaker at the 1966 annual convention of the Michigan State Medical Assistants Society in Grand Rapids. Here she visits with Mrs. Alta Green, left, president for 1966-67.

AT LEFT — The MSMS Council and its standing committees will be led by these men during 1966-67. Robert Mason, M.D., seated left, of Birmingham, is the new Council chairman, and Ross V. Taylor, M.D., seated right, Jackson, is the new vice-chairman. Standing are the four standing committee chairmen, left to right, Brooker L. Masters, M.D., Fremont, Publication Committee; Don Marshall, M.D., Kalamazoo, Education Liaison Committee; Robert K. Whiteley, M.D., Grosse Pointe, Finance Committee, and Harold H. Hiscock, M.D., Flint, County Societies Committee.

ELOW — The Past President's Scroll is presented with deep appreciation o Luther R. Leader, M.D., right, for his outstanding service as MSMS Pres-dent for 1965-66 by the new president, C. Allen Payne, M.D.

The new chairman of The MSMS Council is Robert J. Mason, M.D., of Birmingham. Advanced from the position of Vice-Chairman, Doctor Mason had served on The Council for the past 7 years.

Delegates Approve Seven Physicians for Certificates of Commendation

Seven outstanding Michigan physicians received coveted Certificates of Commendation by the 1966 MSMS House of Delegates at the Annual Session in Grand Rapids.

They are Arthur C. Curtis, M.D., Ann Arbor; Lionel L. Davis, M.D., Mt. Pleasant; Mark Marshall, M.D., Ann Arbor; Harold J. Meier, M.D., Coldwater; Ralph H. Pino, M.D., Detroit; Alfred B. Swanson, M.D., Grand Rapids; and Harry A. Towsley, M.D., Ann Arbor.

Nominated by their county medical societies, the awardees were recommended by a special House of Delegates Committee on Certificates of Commendation.

The 1966 certificates read:

ARTHUR C. CURTIS, M.D. – "In recognition of his distinguished career in internal medicine and specifically for his twenty years as chairman of the University of Michigan Department of Dermatology and for able leadership in many state and national medical organizations."

LIONEL L. DAVIS, M.D. – "In recognition of his distinguished career as physician and surgeon at Mt. Pleasant for more than 30 years and also for his dedicated leadership to provide medical facilities for his community."

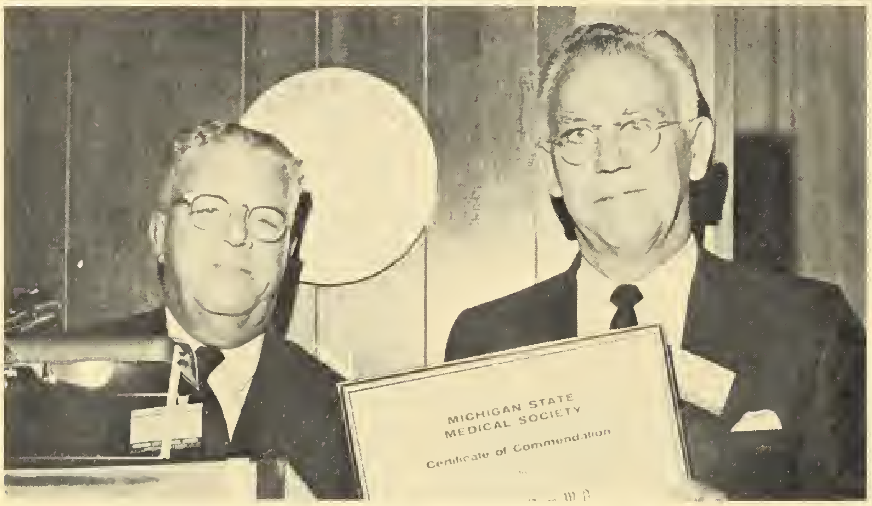
MARK MARSHALL, M.D. – "In recognition of his distinguished career in internal medicine for more than half a century in Ann Arbor and also for his generous guidance to medical students, interns, residents and young physicians at St. Joseph Mercy Hospital, Ann Arbor."

HAROLD J. MEIER, M.D. – "In recognition of his distinguished service as a practicing physician and surgeon at Coldwater for thirty years, and also for his outstanding contributions as a leader of the Branch County Medical Society and as a former chairman of The MSMS Council."

RALPH H. PINO, M.D. – "In recognition of his distinguished career as an ophthalmologist, Wayne County Medical Society leader, Wayne State University professor emeritus, Michigan Health Council leader in health career recruitment, and one of the founders of Michigan Medical Service."

ALFRED B. SWANSON, M.D. – "In recognition of his unselfish contributions to international health, and specifically his three trips to teach and provide medical and surgical care to the people in South Vietnam and to help establish a polio immunization program there."

HARRY A. TOWSLEY, M.D. – "In recognition of his distinguished career as a nationally-recognized pediatrician, innovator of postgraduate medical education programs, University of Michigan medical educator, and effective leader in MSMS and also many state and national medical and welfare organizations."



Harold H. Meier, M.D., right, of Coldwater, was honored for his fine service to The Council, his Branch County Medical Society and for many local civic contributions when the Speaker James J. Lightbody, M.D., presented a coveted MSMS Certificate of Commendation. Doctors Curtis, Davis and Marshall were unable to be present for the ceremonies.

Harry A. Towsley, M.D., center, Ann Arbor, shows his Certificate of Commendation to William R. Reksham, M.D., right, and Clarence E. Crook, M.D., left, two other members of the Washtenaw delegation.

Alfred B. Swanson, M.D., right, Grand Rapids, who has made three trips to help the natives of Viet Nam, was saluted by the House of Delegates, which voted him a Certificate of Commendation. Making the formal presentation was Speaker James J. Lightbody, M.D.

Ralph H. Pino, M.D., Detroit, left, who received a Certificate of Commendation for his service to Wayne County Medical Society, the Michigan Health Council and Blue Shield, also was one of 50 to be recognized for 50 years of practice as a physician. He received his 50-Year Pin from MSMS President Leader.

The unofficial summary of the 1966 House of Delegates was sent to each member of MSMS in October as a featured part of the October Medigram. Several articles about House activities appear throughout this publication, in addition to this eight-page photographic layout.

BATTLE CREEK WOMAN TO LEAD ASSISTANTS

Mrs. Alta Greene, of Battle Creek, will direct the Michigan Society of Medical Assistants for the coming year, with Mrs. Nelda Gasperson, of Mt. Clemens, as the new president-elect.

Other officers who were elected at the 1966 annual convention in Grand Rapids were Mrs. Dorothy L. Warner, of Kalamazoo, Vice President; Mrs. Mary Jordan, of Eaton Rapids, Treasurer; Mrs. Donna Fogal, of Port Huron, Recording Secretary; and Mrs. Dorothy Brandis, of Lansing, Speaker of the House.

Mrs. Lenore Romney, Michigan's First Lady, spoke at the President's Luncheon about "Citizen Responsibility in an Election Year." Mrs. Romney said it is a woman's responsibility to vote intelligently and to do this she must understand the issues and then vote for the person who reflects her ideas.

The banquet speaker was Homer H. Stryker, M.D., Kalamazoo, who related some of the many obstacles he encountered while trying to get his frame company started.

A panel discussion on "Phases of Medicare" included Miss Ruth Morrissey of Chicago, Acting Assistant Regional Representative for Health Insurance; Miss Helen Schick of Detroit, Educational Coordinator-Michigan Medical Service; and Miss Monica LaSarge of Lansing, Administrative Assistant to Medical Director of Department of Social Welfare.

"Safety Education for You and the People You Serve" was the topic of Mrs. Leota Westfall, Traffic Safety Control, Lansing.

In-Service Training Certificates were presented by Glenn E. Millard, M.D., Detroit, and the Blue Shield Award was presented to Mrs. Juanita Ferman by Mr. John Verbiest and Miss Helen Schick.

Lester P. Dodd, right, MSMS Legal Counsel for the past 10 years, was voted an Honorary Member of the Michigan State Medical Society by the delegates. Offering congratulations is Fred C. Brace, M.D., Kent Delegate who introduced the resolution.

Elect 15 Men To MMS Board

Fifteen men were elected to the board of directors of Michigan Blue Shield at the corporation annual meeting Sept. 27 in Grand Rapids.

The meeting was held in conjunction with the annual meeting of the Michigan State Medical Society. Those elected include public members, doctors and hospital administrators.

Physician representatives elected were John M. Wellman, M.D., Lansing, Blue Shield President; James B. Blodgett, M.D., Detroit; Frederick S. Gillett, M.D., Grand Rapids; Homer A. Howes, M.D., Detroit; A. J. Neerken, M.D., Kalamazoo; and Joseph A. Witter, M.D., Detroit.

Upon the recommendation of the MMS board, the number of osteopaths on the board was increased from one to two. Philip Adler, D.O., Highland Park, President of the Michigan Association of Osteopathic Physicians and Surgeons, was re-elected, and named for the first time was Frank J. McDevitt, D.O., Livonia.

Presente
HOUSE OF
MICHIGA
MEDICAL
D. Bruce W
In deep appreciation
of distinguished service
and for outstanding
of his profession and th

D. Bruce Wiley, M.D. was cited by the 1966 House of Delegates for his many years of service as a MSMS Councilor, Council Chairman, and MSMS Secretary. He left private practice this past year in Utica to join the state health department and at that time resigned as secretary.

Honor Les Dodd, Now Honorary MSMS Member

The following resolution was adopted by the 1966 House of Delegates to make Lester P. Dodd, JD, an Honorary Member:

"Whereas, for a full decade, the House of Delegates, the MSMS Council, most committees and many individual members of the Michigan State Medical Society have had the rare privilege of associating with, and benefiting from the wise counsel of, one of Michigan's most eminent jurists, a man who has always given unstintingly of his great talents, knowledge, energies and enthusiasm for the benefit of the medical profession; now therefore be it

"RESOLVED: That this House of Delegates, upon the hearty recommendation of the Kent County Medical Society, confer honorary membership in the Michigan State Medical Society upon the Legal Counsel of the Michigan State Medical Society:

LESTER P. DODD, JD

and be it further

"RESOLVED: That a suitable copy of this resolution be presented to Mr. Dodd as a lasting memento of the great esteem and affection in which he is held by us all.

"Mr. Speaker: I move that the rules be suspended for the purpose of placing this resolution on its immediate consideration, and that it be adopted by a rising, unanimous vote."

New Benefits Told In MMS Record

The new and extended automobile benefits which became effective September 1 for Chrysler, Ford and GM employees were explained in the recent August issue of the Michigan Blue Shield Record.

TREATMENT OF ALCOHOLIC/Continued from Page 967

In practice, this means that, just as a schizophrenic patient will not generally profit much from "understanding" the horrifying meaning of his delusions, an alcoholic usually does not benefit by "gaining insight," verbally into the nature of some of his intimate problems. For instance, one may early in treatment realize that the patient is very angry with other people, sometimes to the point of intense rage, but for him to become aware of this without preparation and the support and protection of a reasonably good relationship to his doctor, can be a potentially very destructive thing.

Where does the anger come from?

We think today that many an alcoholic reacts this way in adult life because of long felt frustrations, which go back to his early childhood.

One answer is that it is in infancy that some of the basic patterns of reaction to life are cast. It is true that most people have some opportunity to change and mature as they grow older, but somebody who constantly fears disappointment by others does not find this easy. They do, in fact, get very little satisfaction in human relationships.

With this vulnerable personality, we suspect, somewhere along the line as this vicious cycle is established, the potential alcoholic "discovers" a substance so wonderful in its properties that, once ingested, it converts loneliness to a gregarious disposition, sadness to gaiety, fear to reaching out (courageously), rage to playfulness, sometimes. When feelings of remorse and discomfort interfere too much, they too can be thrown into oblivion by further drinking.

This chemical substance is more stable, more accessible, more available, and easier to control than another human being. With it, the alcoholic is lulled into forgetting his intense need for companionship, comradeship, and love. There is no way a glass of beer or a shot of whiskey can "hurt" one's feelings the way a friend can. And few friends can give one the warm glow strong liquor gives, slowly trickling down one's throat.

It is not a coincidence that mild alcoholic stupor is so often described as "feeling no pain."

Disgust with the Patient

Curiously enough, feelings of disgust or disappointment with the patient *that the doctor is aware of* are not usually troublesome; in fact, they can be put to good use in the therapeutic relationship. Unknown feelings about the patient, which the doctor is not aware of, and which may become apparent only after a good deal of self observation and discussion, are more likely to create problems.

> Moore (Op. Cit.) described the case of a resident physician who had strong feelings of disgust about one of his patient's behavior. The patient would go home on weekend visits, and return to the hospital inebriated. After a while the resident felt that he was being unjustly criticized for his management of the case and "took his patient's side" against the rest of the staff.
>
> He felt that nobody liked the patient, except the doctor himself. When the patient was finally discharged, and the early interviews were again reviewed, the resident was surprised to recognize in his dictation feelings of disgust. He had overcompensated for these feelings by being "very permissive" with the patient. The end result, however, demonstrated his true feelings, as the patient was driven away from effective treatment.

Another common difficulty is the doctor's need to feel that the patient likes him. It is recommended in the literature that any time one makes a decision about treatment one should ask, "Am I doing this for the patient's benefit, or just so that he will like me?"

While it is desirable and very useful for an AA member to be a crusader, and as Ludwig has pointed out, change his *compulsion to drink* for a *compulsion to keep himself and others from drinking*,[3] the doctor can ill afford such a rigid and blind mechanism.

Finally, a piece of information about treatment which perhaps summarizes most of the problems in the clinical field:

"It is not what we say to the alcoholic," Chafetz says, "but what we really feel and do that will determine the outcome."

BIBLIOGRAPHY

1. Moore, Robert A.—Etiology of Chronic Alcoholism — The Journal of the Michigan State Medical Society, October, 1953 Vol. 62 #10 pp 984-989.
2. Hoff, E. C.—Quart. Journal of St. on Alcohol, Supplement #1, November 1961, pp 57-65.
3. Chafetz, Morris—Practical and therapeutic considerations in alcoholism—Quarterly Journal of Studies on Alcohol—20: pp 281-291, 1959.
4. Bacon, S. D.—Social settings condusive to alcoholism: A sociological approach to a medical problem—JAMA, 164: 177, 1957.
5. Kalant, H.—Some recent physiological and biochemical investigations on alcohol and alcoholism—Quarterly Journal of Stud. on Alcohol 23:52, 1962.
6. Moore, R. A.—Reaction Formation as a counter-transference phenomena in the treatment of alcoholism—Quarterly Journal of Studies on Alcohol, September 1961, Vol. 22 #3, pp 481, 486.
7. Moore, R. A.—The Problems of Abstinence — Quarterly Journal of Studies on Alcohol—QJSA 23: pp 105-111, 1962.
8. Krystal, H—The problem of Abstinence — QJSA 23: pp 122-123, 1962.
9. Wallerstein, Robert S. et al — Hospital treatment of alcoholism — Basic Books, New York, 1957.

ORIGINAL
SCIENTIFIC
ARTICLE

Abstract — This is a report of data acquired from parents in two rural counties of Michigan as to the susceptibility and immunity to measles status of elementary school children.

A Study of Susceptibility And Immunity to Measles

By Arthur W. Newitt, M.D., M.P.H.
Lansing

Now that vaccine for the prevention of measles (rubeola) has been perfected, it is important that physicians and public health departments have a measure to determine the status of children in regard to susceptibility and immunity to measles.

From the epidemiological viewpoint it is fortunate that naturally acquired measles is followed by a firm immunity to further natural infection. Accumulated evidence to date indicates that the living attenuated virus, used for vaccination, also confers stable immunity so that its administration to susceptible children should reduce the incidence of measles in proportion to the thoroughness with which susceptibles are sought out and immunized.

In order to provide such a measure, a large sampling of elementary school children was made in Gratiot and Montcalm Counties, Michigan. A questionnaire was devised to obtain, from the parents of elementary school children, information as to whether or not the child had had measles and whether or not the child had been given measles vaccine. The forms to be filled out by the parents were delivered to the elementary schools by health department public health nurses. Their use was explained to the school faculty and through its cooperation, a form for each child was taken home to his parents.

Distribution of the questionnaire was made during the third week in April, and they were collected from the schools during the first two weeks in May, 1966.

Tabulation of the data was begun promptly, and completed in June, 1966. Over 90 per cent of the forms that were sent to the homes were returned with sufficient information that could be tabulated. These are accounted for in the "Total Observed" column of the accompanying tables.

The form that was distributed to parents contained the following paragraph:

> "The measles referred to in this inquiry is the kind that causes a blotchy, dusky-red rash on the third or fourth day following the onset of fever, runny nose, watery eyes, and cough. The illness lasts 4 to 6 days often followed by a branny scaling of the skin. It is a different disease from German or 'three day' measles."

The answers received indicated that most parents were able to distinguish rubeola from rubella.

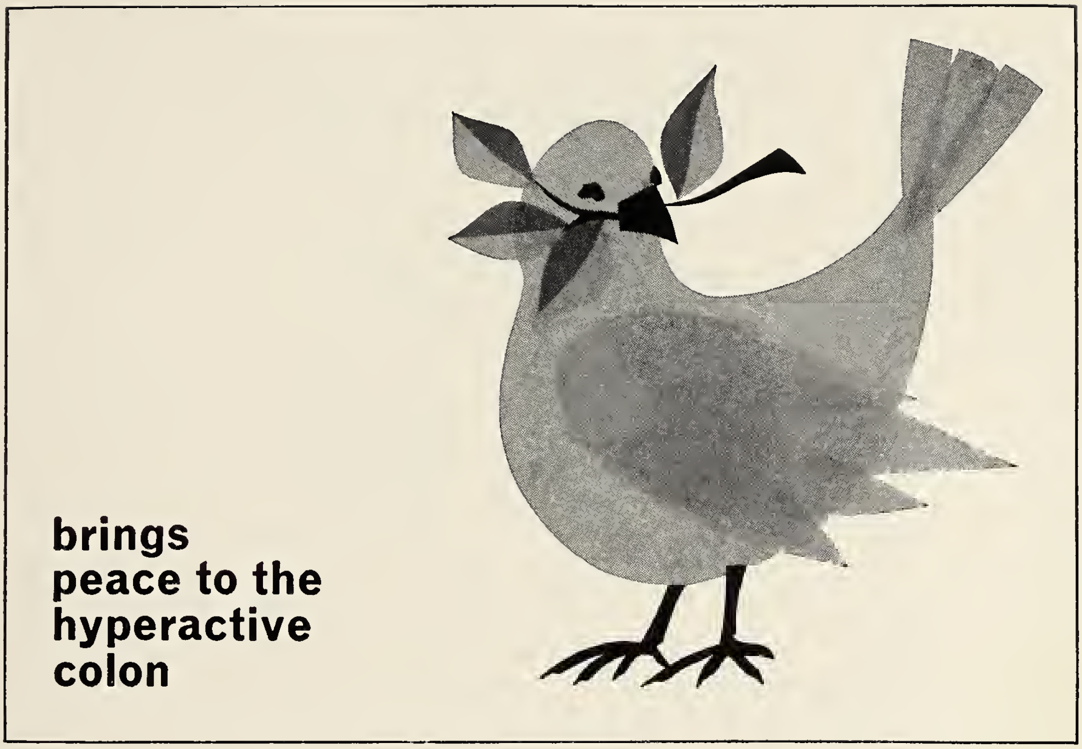
No distinction was made in the questionnaire between live and dead measles vaccine. Physicians, in the area surveyed, limited their use of vaccine to the live attenuated strains. A question relating to the administration of gamma globulin was included in the questionnaire for the purpose of determining its use to modify the severity of measles. None of the answers indicated it had been used. We concluded that no useful information had been supplied probably because few of the parents were knowledgeable about the product. At present, the

Author

Arthur W. Newitt, M.D.

Doctor Newitt, former health officer of the Ingham County Health Department, is currently serving as a consultant to the Michigan State Department of Public Health.

This study conducted with the assistance of George H. Agate, M.D., Chief, Division of Epidemiology, Michigan Department of Public Health, Lansing.



CANTIL®
(mepenzolate bromide)

helps restore normal motility and tone

"In 40 of 44 cases of irritable or spastic colon, Cantil [mepenzolate bromide] or Cantil with Phenobarbital reduced or abolished abdominal pain, diarrhea and distention and promoted restoration of normal bowel function . . . Cantil [mepenzolate bromide] proved to be singularly free of anticholinergic side-effects . . . Urinary retention, noted in two cases was eliminated in one by reducing dosage."[1]

IN BRIEF: One or two tablets three times a day and one or two at bedtime usually provide prompt relief. Cantil with Phenobarbital may be prescribed if sedation is required.

Dryness of the mouth or blurring of vision may occur but it is usually mild and transitory. Urinary retention is rare. Caution should be observed in prostatic hypertrophy—withhold in glaucoma. Cantil with Phenobarbital is contraindicated in patients sensitive to phenobarbital.

Supplied: CANTIL (mepenzolate bromide)—25 mg. per scored tablet. Bottles of 100 and 250. CANTIL with PHENOBARBITAL —containing in each scored tablet 16 mg. phenobarbital (warning: may be habit forming) and 25 mg. mepenzolate bromide. Bottles of 100 and 250.

[1] Riese, J. A.: Amer. J. Gastroent. 28:541 (Nov.) 1957

LAKESIDE LABORATORIES, INC. Milwaukee, Wisconsin 53201

LAKESIDE

PRODUCTS
FOR PATIENTS
YOU SEE
EVERY DAY

TABLE I — GRATIOT COUNTY

Grade	Total Observed	Have Had Measles	Per Cent	Have Had Vaccine	Per Cent	Have not Had Measles or Vaccine	Per Cent
Kindergarten	683	107	16%	174	25%	402	58%
1st Grade	862	311	36%	165	19%	386	44%
2nd Grade	869	364	42%	135	15%	370	42%
3rd Grade	801	375	46%	87	11%	339	42%
4th Grade	728	344	46%	60	9%	324	44%
5th Grade	724	327	45%	58	9%	339	46%
6th Grade	643	323	50%	48	8%	272	42%
7th Grade	448	215	48%	29	7%	204	45%
8th Grade	368	164	44%	24	6%	180	50%
Spec. Education	62	23	37%	2	3%	37	60%
TOTALS	6,188	2,553	41%	782	12%	2,853	46%

TABLE II — MONTCALM COUNTY

Grade	Total Observed	Have Had Measles	Per Cent	Have Had Vaccine	Per Cent	Have not Had Measles or Vaccine	Per Cent
Kindergarten	561	230	41%	90	16%	241	43%
1st Grade	599	277	46%	66	11%	256	43%
2nd Grade	630	317	50%	55	9%	258	41%
3rd Grade	548	336	61%	23	4%	198	36%
4th Grade	526	338	64%	20	4%	168	32%
5th Grade	529	327	62%	10	2%	192	36%
6th Grade	477	308	64%	10	2%	129	33%
7th Grade	370	245	66%	12	3%	113	31%
8th Grade	380	245	64%	2	1%	133	35%
Spec. Education	96	40	42%	2	2%	54	56%
TOTALS	4,716	2,663	56%	290	6%	1,766	37%

Schwarz strain of live attenuated virus vaccine is being used by the physicians and the health department, exclusively.

Table I for Gratiot County and Table II for Montcalm County summarize the data that were collected. Both tables show that a substantial percentage of elementary school children in all grades need to be immunized. This circumstance points up the urgency of a campaign to reduce the number of susceptible school children as soon as possible. A susceptible school child has a greater chance of being exposed to the disease than a pre-school child. If he contracts the infection he will expose all susceptible siblings in his household. Since infants and young children are more liable to develop complications such as secondary pneumonia, otitis media or post-infectious encephalitis their exposure should be avoided.

Although the samples of children in special education classes are small there is evidence that such groups have a high percentage of susceptibles. It would seem that since such children are already handicapped they should be protected from further hazards that measles might produce.

There is enough similarity in the two tables to indicate what might be expected in other communities. It is suggested that extrapolation, of the data furnished here, to other populations may be useful in making at least a rough estimate of what could be expected. Such information also should be useful in estimations of the number of doses of vaccine that would be needed to bring the diseases under definite control.

AMERICAN MEDICAL ASSOCIATION
20TH CLINICAL CONVENTION
NOVEMBER 27-30,1966
AMA '66
LAS VEGAS

what time is it?

For the past
two years
there's been
one new case
of active tuberculosis
reported for every
four thousand
of U.S. population.

it's time to tine.

Tuberculin,
Tine Test
(Rosenthal) Lederle

Available in 5's and 25's.
Order now
from your pharmacist
or your Lederle
representative.

LEDERLE LABORATORIES, A Division of American Cyanamid Company, Pearl River, New York Lederle
414-6—4046R

Who Is Practicing Medicine

By Theodore G. Klumpp, M.D.
President, Winthrop Laboratories
New York City

The care and treatment of the patient was once the sole responsibility of the attending physician. His judgment was final and subject only to the standard of acceptable medical practice in the opinion of his community peers.

But the practicing physician's freedom of judgment is being increasingly hemmed in by Federal and State laws and the enforcement policies of the agencies administering them. The mounting threat of malpractice suits is another serious factor that further curbs the physician in his efforts to individualize therapy.

Bearing on this, an expanding cohort of lawyers have come to specialize in the technologies of malpractice suits and have organized an association to exchange information and experiences, and known as ATLA, American Trial Lawyers Association. Its name was recently changed from National Association of Claimants' Attorneys.

It is not difficult to surmise what effect this banding together of lawyers has on the incidence of malpractice suits and their outcome.

Having a particular bearing on malpractice suits is Section 502 (f) and (n) of the Food, Drug and Cosmetic Act which is concerned with directions for use, warnings, side effects and contraindications.

There should be no objection to suggested directions for use, reasonable warnings, a listing of reported side effects, and reference to what some experienced observers consider to be contraindications. But these directions, warnings and contraindications are being stated in mandatory language, "Do not use....", "Use only....", "Avoid....".

For the medical practitioner to use his own judgment, which may diverge from the "Thou shalt" or "Thou shalt not" directions found in the labeling, immediately exposes him to the hazard of a malpractice law suit. In other words, the Food and Drug Administration or the manufacturer, perhaps through the inadvertance of its choice of words, has placed the physician in an indefensible position.

In the opinion of the author, directions, warnings and contraindications should be suggestive and advisory in tone and language. They should be "Recommended dose....", "It is suggested....", "According to some authorities....".

When addressed to the physicians, labeling should contain suggestions, not directions or orders. After all, it is the physician in his office or at the bedside who is practicing medicine and the responsible person, not some anonymous doctor in an office of the Food and Drug Administration or of the pharmaceutical manufacturer.

This is a problem that should be of primary concern to our medical organizations.

Urges Physicians Again To Use Seat Belts

By Paul W. Gikas, M.D., Chairman,
MSMS Committee on Highway Injury

The recent Labor Day weekend established a new all time high in traffic fatalities with 623 reported deaths. This macabre figure topped the previous summer holiday highway fatality record set this past Independence Day.

The trend so far this year has been upward with a new record entered for each of the four major holiday periods from New Year's Day through Labor Day. The tragedy associated with this loss of life is compounded by the fact that with knowledge presently available nearly 50% of these deaths could be prevented, even though the accident occurred.

People die in an automobile accident essentially as a result of two events. They either receive their fatal injuries when they are ejected from their vehicle or they die as a result of injuries sustained in the secondary collision between them and the inside of their vehicle. The lap seat belt, which has been available for nearly a decade, prevents ejection and can prevent or modify the secondary collision within the car.

Unfortunately, only about one-third of the driving public bother to wear seat belts. Physicians are some of the greatest offenders in this rejection of a proven safety device. Highway injuries are as much a public health problem as neoplastic, degenerative and infectious diseases.

We physicians utilize accepted immunization procedures in ourselves and our families and we urge their use in our patients, yet we leave seat belts unfastened in our own cars and are half hearted in prescribing this preventive medicine device for our patients. The seat belt is certainly no panacea because there are lethal objects in our current model cars which one can strike with a seat belt fastened.

Hopefully, with the needed stimulus of government safety standards, future automobiles will be

(Continued on Page 986)

Soyalac SOLVES THE PROBLEM

...and BABY APPROVES!

Baby has a thing or two to say about a hypo-allergenic, milk-free diet!

Soyalac is the good-tasting, fibre-free formula that infants readily accept. The exclusive Soyalac process results in a consistency much like milk, with a light, creamy color—and nut-like flavor but without a trace of sediment.

Soyalac satisfies the infant. Strikingly similar to mother's milk, it provides protein of high biologic value and balanced nutrients. Clinical data furnish evidence of Soyalac's excellence in promoting normal growth and development.

Loma Linda
Soyalac
CONCENTRATED
LIQUID
Hypoallergenic
For Infants
Children and Adults
Loma Linda Foods

Free Booklet and Samples

A request on your professional letterhead or prescription form will bring to you complete information and a supply of samples.

Soyalac

a product of

LOMA LINDA FOODS
MEDICAL PRODUCTS DIVISION
RIVERSIDE, CALIFORNIA
Mount Vernon, Ohio, U.S.A.

more crashworthy and possess less hazardous interiors, increasing the degree of protection offered by seat belts in an accident. In spite of these deficiencies in present day cars, the seat belt offers the greatest readily available means for reduction in mortality on our highways.

The fact that our state legislature has been unsuccessful in passing meaningful legislation to control drinking drivers and to remove mechanically defective cars from our highways makes the need for seat belts and crashworthy cars even more acute.

How Would You Answer These Michigan Issues?

What are some of the issues facing Michigan in 1966-67?

Likely, physicians would come up with a list that would deal with such issues as medical education, mental health, venereal disease control and many others.

The Michigan State Chamber of Commerce has published a folder which lists 76 issues on the state level. The folder points out that "How these issues will be answered depends on who is in a position to make decisions — the officials that are elected in 1966."

The folder includes many issues that are of concern to physicians. How should the following be answered:

"How should the state of Michigan meet the challenge of true fiscal reform? What should the state undertake to meet the demand for more property tax relief?"

"Should a higher or lower limit be placed on local property taxes?"

"Should the business activities tax be repealed?"

"Should employees have the sole right to select physicians in workmen's compensation cases?"

"Should the welfare system in Michigan be completely examined and reviewed in line with the 1965 amendments to the Social Security Act relating to expanded medical care benefits for welfare recipients?"

"Should the community college system be expanded? If so, in what areas? — liberal arts — business — vocational?"

"Should there be a mandatory periodic inspection of motor vehicles licensed in Michigan?"

"Should driver licensing be placed in the hands of a single state agency?"

"Should a statement of legislative intention and explanation be filed with every public act enacted?"

BRIGHTON HOSPITAL

A non-profit foundation

FOR ALCOHOLISM

Member, Michigan Hospital Association

A facility designed to rehabilitate and aid the compulsive drinker in arresting his addiction.

Brighton Hospital meets the standards established by the Michigan State Board of Alcoholism and is recommended by that Board.

12851 East Grand River
One block south of I-96 at Kensington Rd. Exit
four miles east of U. S. 23
Brighton, Michigan
ACademy 7-1211

PANACEA
Saxon

And now . . . for all you cold sufferers who've been looking for a cure-all.

hey can't cure a cold. We can't cure a cold. You can't cure cold. But what you can do is relieve the symptoms, making he patient comfortable and the cold bearable.

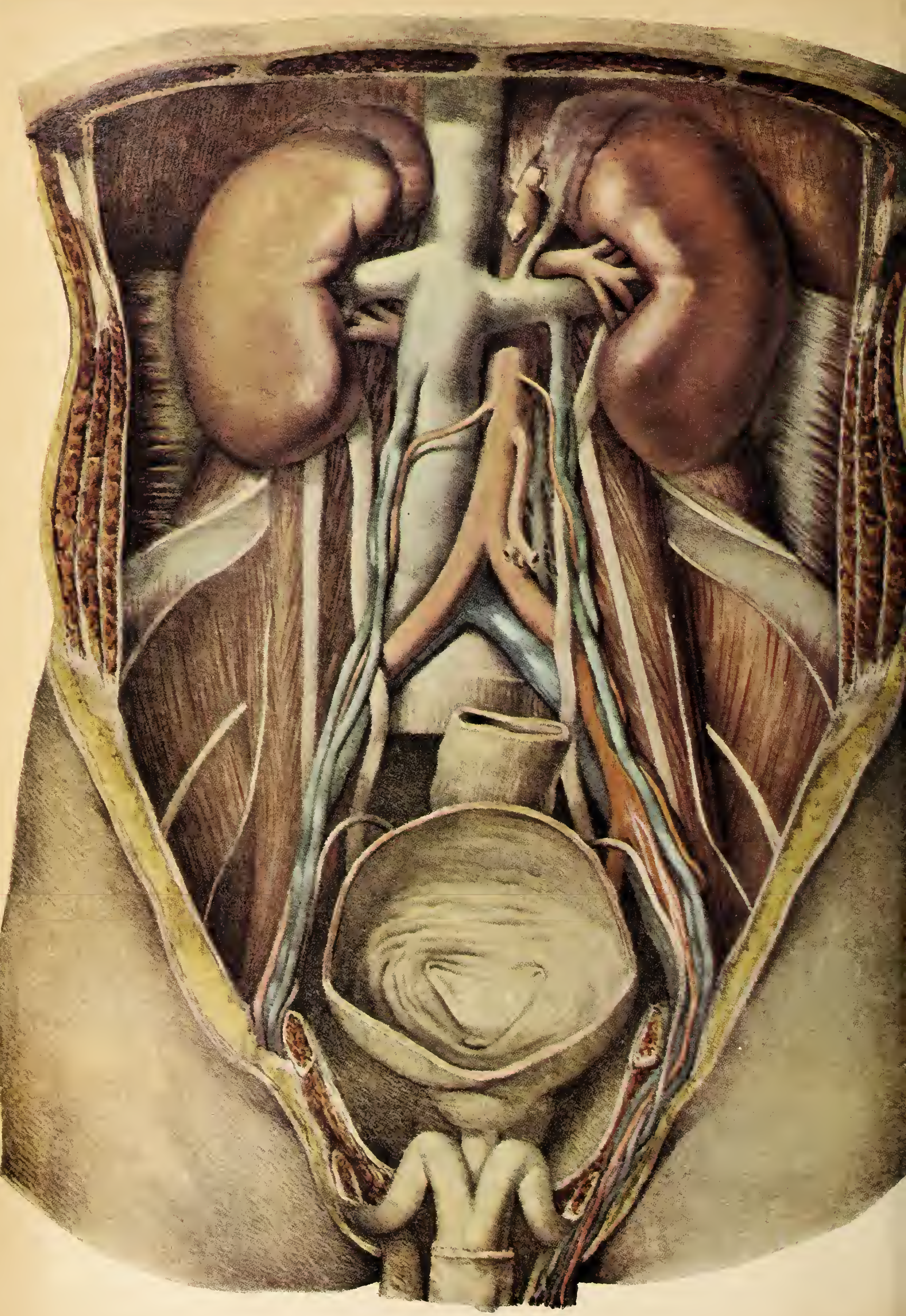
he patient suffering from head cold congestion, for instance, hould breathe easier when you prescribe Novahistine LP. lovahistine LP is a long-acting decongestant that helps estore normal mucus secretion and ciliary activity—physio-ogic mechanisms which prevent infection of the respiratory ract. Two tablets in the morning and two in the evening will rovide around-the-clock relief by helping to keep congested ir passages clear, thus enabling your cold patient to enjoy ormal and free breathing.

Use cautiously in individuals with severe hypertension, diabetes mellitus, hyperthyroidism or urinary retention. Tell patients who operate machinery or motor vehicles that drowsiness may result.

Each Novahistine LP tablet contains: phenylephrine hydrochloride, 25 mg., and chlorpheniramine maleate, 4 mg.

PITMAN-MOORE Division of The Dow Chemical Company, Indianapolis DOW

NOVAHISTINE® LP For relief of nasal congestion.



Wide-range bactericidal action for genitourinary infections

NEW OMNIPEN®
(AMPICILLIN) WYETH

A penicillin that exhibits effectiveness within the gram-positive spectrum of penicillin G* and the gram-negative spectrum of chloramphenicol and the tetracyclines.*

Active at foci of infections—kidney, ureter, bladder or urethra.

Effective against many gram-negative and gram-positive pathogens—thus may be valuable not only in genitourinary but also in common respiratory and gastrointestinal infections.

Normally produces high and persistent levels in blood and high concentrations in bile and urine.

Significant inherent stability.

**Exclusive of penicillinase-producing bacteria.*

Indications: Urinary tract infections, especially those caused by *E. coli*, *Proteus mirabilis*, and *Streptococcus faecalis* and *viridans;* respiratory infections caused by *H. influenzae*, pneumococci, streptococci, and nonpenicillinase-producing staphylococci; and gastrointestinal infections caused by *Shigella* and *Salmonella*, including *Sal. typhosa.*

Contraindications: Hypersensitivity to penicillin; infections due to penicillinase-producing staphylococci and other penicillinase-producing bacteria.

Precautions: If allergic reaction occurs, discontinue ampicillin and administer epinephrine, corticosteroids, antihistamines and/or pressor amines as indicated. Transient moderate elevation of SGOT values of undetermined significance was noted in a few infants. Liver and kidney function as well as hematopoietic tests are advisable during therapy, particularly in infants. As with other antibiotics, precautions should be taken against gastrointestinal superinfection. Safety for use in pregnancy has not been established.

Adverse Reactions: Occasional mild side effects as urticaria, skin rash, pruritus, diarrhea, nausea and vomiting. There have been no reports of blood dyscrasias, liver or kidney damage. Anaphylaxis has been reported.

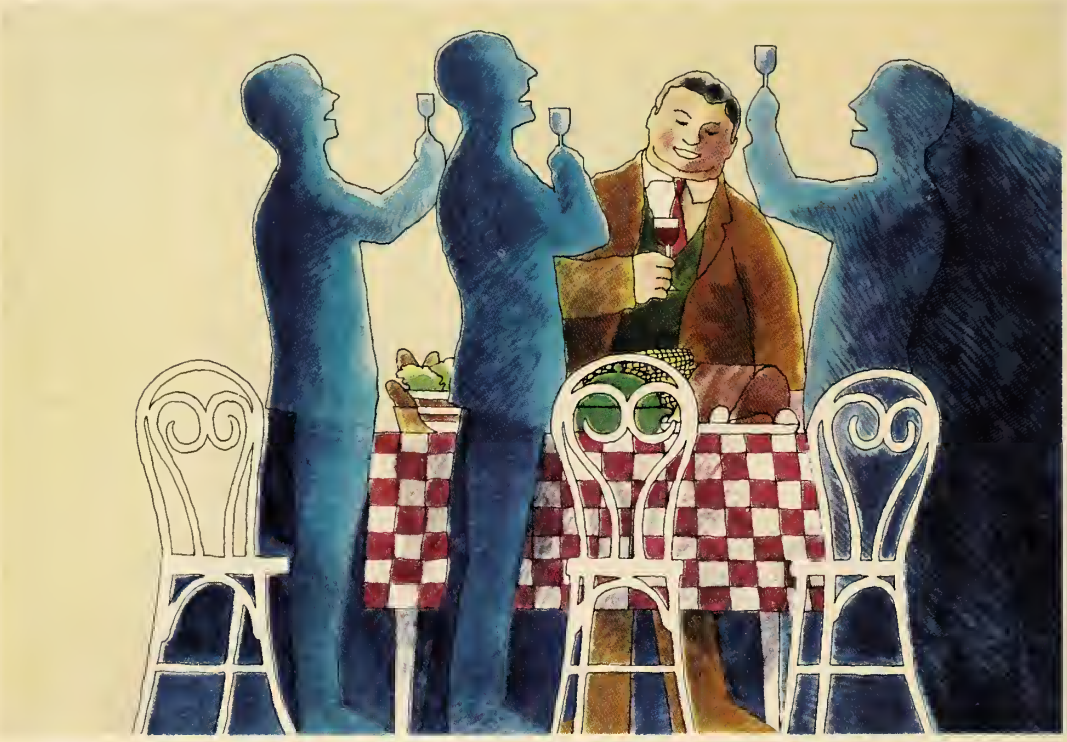
Composition: Capsules, 250 mg.

American Hospital Formulary Service Category No. 8:12.16.

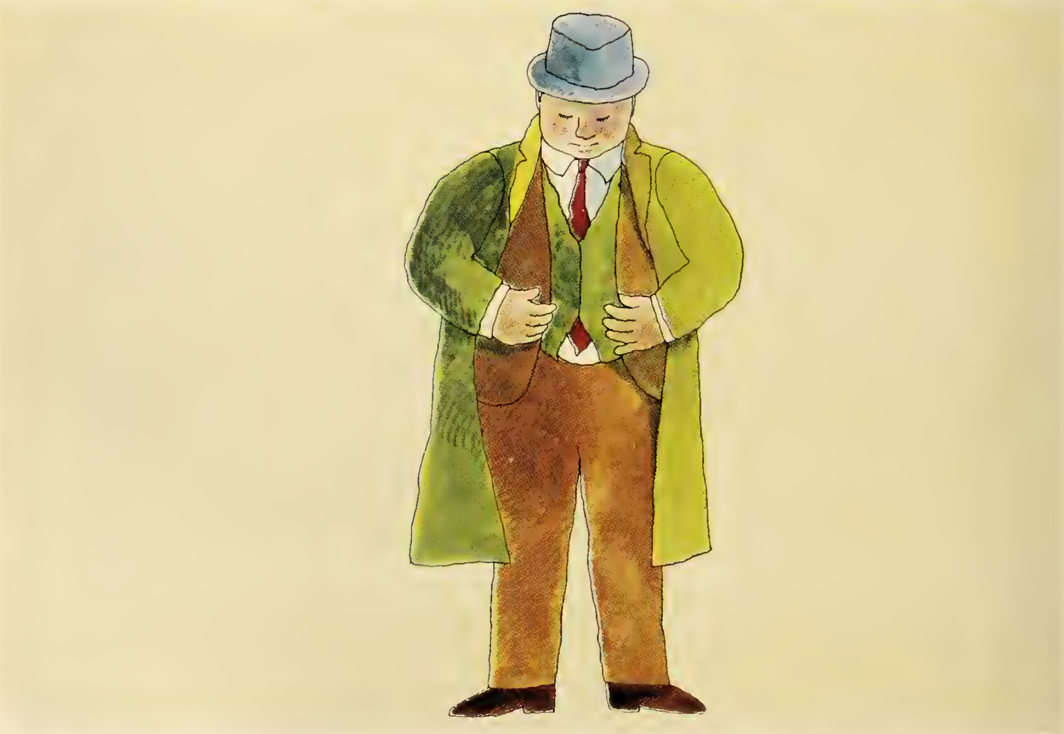
Wyeth Laboratories Philadelphia, Pa.

Wyeth®
SERVICE TO MEDICINE

For he's a jolly good fellow



But what does he think?



Many overweight patients can benefit from the appetite control provided by the sustained anorexigenic-tranquilizing action of BAMADEX SEQUELS: anorexigenic action of amphetamine; tranquilizing action of meprobamate; prolonged action through sustained release of active ingredients.

Bamadex® Sequels®

DEXTRO-AMPHETAMINE SULFATE (15 mg.) WITH MEPROBAMATE (300 mg.) SUSTAINED RELEASE CAPSULES

to help establish a new dietary pattern

Contraindications: Dextro-amphetamine sulfate: in hyperexcitability and in agitated prepsychotic states. Previous allergic or idiosyncratic reactions to meprobamate.
Precautions: Use with caution in patients hypersensitive to sympathomimetic compounds, who have coronary or cardiovascular disease, or are severely hypertensive.
Dextro-amphetamine sulfate: Excessive use by unstable individuals may result in psychological dependence.
Meprobamate: Careful supervision of dose and amounts prescribed is advised, especially for patients with known propensity for taking excessive quantities of drugs. Excessive and prolonged use in susceptible persons, e.g. alcoholics, former addicts, and other severe psychoneurotics, has been reported to result in dependence on the drug. Where excessive dosage has continued for weeks or months, reduce dosage gradually. Sudden withdrawal may precipitate recurrence of preexisting symptoms such as anxiety, anorexia, or insomnia; or withdrawal reactions such as vomiting, ataxia, tremors, muscle twitching and, rarely, epileptiform seizures. Should meprobamate cause drowsiness or visual disturbances, reduce dosage and avoid operation of motor vehicles, machinery or other activity requiring alertness. Effects of excessive alcohol consumption may be increased by meprobamate. Appropriate caution is recommended with patients prone to excessive drinking. In patients prone to both petit and grand mal epilepsy meprobamate may precipitate grand mal attacks. Prescribe cautiously and in small quantities to patients with suicidal tendencies.
Side Effects: Overstimulation of the central nervous system, jitteriness and insomnia or drowsiness.
Dextro-amphetamine sulfate: Insomnia, excitability, and increased motor activity are common and ordinarily mild side effects. Confusion, anxiety, aggressiveness, increased libido, and hallucinations have also been observed, especially in mentally ill patients. Rebound fatigue and depression may follow central stimulation. Other effects may include dry mouth, anorexia, nausea, vomiting, diarrhea, and increased cardiovascular reactivity.
Meprobamate: Drowsiness may occur and can be associated with ataxia; the symptom can usually be controlled by decreasing the dose, or by concomitant administration of central stimulants. Allergic or idiosyncratic reactions: maculopapular rash, acute nonthrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever, transient leukopenia. A case of fatal bullous dermatitis, following administration of meprobamate and prednisolone, has been reported. Hypersensitivity has produced fever, fainting spells, angioneurotic edema, bronchial spasms, hypotensive crises (1 fatal case), anuria, stomatitis, proctitis (1 case), anaphylaxis, agranulocytosis and thrombocytopenic purpura, and a fatal instance of aplastic anemia, but only when other drugs known to elicit these conditions were given concomitantly. Fast EEG activity, usually after excessive dosage. Impairment of visual accommodation. Massive overdosage may produce drowsiness lethargy, stupor, ataxia, coma, shock, vasomotor and respiratory collapse.

LEDERLE LABORATORIES
A Division of American Cyanamid Company,
Pearl River, New York
695-6

Review of Social and Economic Aspects Of the Prescription Drug Industry

PHARMACEUTICAL RESEARCH SAVES LIVES

The general public and the medical profession enthusiastically salute the pharmaceutical industry for its search for new and improved drugs.

Introduction of new drugs each year has sharply curtailed death rates and provided other human benefits.

Government studies place the drug industry as the leader in company-financed research. Related to this excellent record is the employment by the pharmaceutical industry of one of every eight employees in medical and health-related research and development activity.

What are the benefits from all this research? For example:

—The death rate from tuberculosis fell from 45.9 in 1940 to 4.9 in 1963.

—The death rate from influenza and pneumonia fell from 70.3 to 37.5 in the same period.

—The trend of increasing mental hospital populations was reversed by the introduction of tranquilizers.

—The decline in the death rate in the past 20 years has meant the saving of 2.9 million lives.

—In a single year the federal treasury received an estimated $1.1 billion in taxes as a result of the saving of one million wage earners' lives.

Competition

Michigan ranks high among the states with drug manufacturing — although the drug industry is one of the least concentrated of all American industries. Government figures show 1,600 firms in the drug-industry category. Surveys reveal great competition, as no one company dominates in the number of retail prescriptions filled.

Domestic sales in 1964 increased six per cent to $2.8 billion. Another measure of the value placed on United States products is the growing sales abroad. Foreign sales of American-based prescription drug firms jumped 12 per cent during the years of 1960 to 1964 — twice the growth rate for the domestic market. Foreign sales now account for one-fourth of total sales.

Quality Control

Physicians especially are interested in the quality-control efforts of the drug firms. Twenty per cent of all production employees work on quality control, and 11 per cent of all manufacturing space is used for quality control facilities.

One company calculates that almost 700 control checks — requiring as long as 30 days — are involved in production of a steroid. Another re-

Pharmaceutical Advertisements Are Worth Reading

The MSMS Publication Committee deeply appreciates the support given by the pharmaceutical industry to Michigan Medicine. The type of advertisement that appears in Michigan Medicine helps to keep members of MSMS abreast of the new products.

The revenue that comes from our advertisers is not only appreciated but also makes possible the publication of Michigan Medicine at a reasonable cost to each member. But the very great importance and value is the basic information that can be found on our advertising pages.

ports that an antibiotic requires over 200 control checks and four weeks.

Research and Development

The public has little concept of the expenditures by the pharmaceutical industry on research and development. The industry spent $50 million on research for the first time in 1951 — and that figure now is six times as great. Current expenditures will shoot past $350,000 for 1966.

During the past decade, the average research and development cost compared to each basic new drug discovery has been $5 million. During the past decade, the rate of growth for research has been nearly three times as great as sales. Sales ncreased 70 per cent — with research spending up 205 per cent.

The National Science Foundation credits the U.S. drug industry as follows regarding expenditures for research and development:

—Finances almost all (98.5 per cent) of its research with its own funds, thus accepting the least amount of federal government research funds of any industry.

—Has the highest per cent among all industries of research funds for applied research (53 per cent).

—Has the highest percentage among all industries of research funds for basic research.

Research Manpower

Almost every physician knows about some associate or college professor who recently has joined a pharmaceutical company research department. The industry now employs over 14,000 physicians, scientists and supporting researchers — an increase of 24 per cent over the 1959 level.

The 22 largest drug companies account for 87 per cent of all research staffs.

There is an increasing demand for more research scientists in the drug field — especially men and women with advanced study in medicine, chemistry, pharmacology and microbiology.

Prescriptions/Expenditures

One of the major changes in the prescription patterns has been the increase during the past several years of new prescriptions which were filled by factory-compounded, company brand names or specialty preparations rather than products compounded by the individual pharmacists.

More than 88 per cent of prescription drugs today are manufactured for oral admission — with tablets accounting for 48 per cent and capsules for 24 per cent of all product forms.

Drug store prescription sales have increased more than 14 times since 1939. The average drug store fills approximately 48 prescriptions per day. Two-thirds of all prescriptions filled cost $3 or less.

Drug manufacturers' price levels of ethical dosage form products were about 14 per cent lower in 1964 than 15 years ago. This decline occurred during a time when prices in general have been rising. The government "all commodities index" rose 27 per cent during the same period.

Americans spend less than a penny of each consumer dollar for drugs.

Philanthropy

The pharmaceutical industry is proud of its performance in philanthropy. The industry contributed a total of $43.5 million to philanthropic and public service activities during 1963. Cash contributions totaled more than $15 million and $28.4 million was contributed by way of goods and service projects.

For More Facts:

Interested physicians and friends may obtain further information about the pharmaceutical industry by writing to the Pharmaceutical Manufacturers Association, 1155 Fifteenth Street, N.W., Washington, D.C. 20005, for a copy of its publication, "Prescription Industry Fact Book." It is a factual reference guide with illustrations, charts and graphs.

against the usual gram-negative urinary pathogens

Why use five...where **one** will do?

In a recent 217-patient hospital study,[1] urinary tract infections were treated with a variety of widely prescribed antimicrobial agents including: a sulfonamide (40 patients), chloramphenicol (20 patients), nitrofurantoin (33 patients), nalidixic acid (30 patients), tetracycline (27 patients), colistimethate sodium (22 patients)...and 2 combinations of 5 agents each (45 patients). The 2 combinations were selected to afford maximal theoretical antibacterial coverage against the usual urinary pathogens. They were (1) tetracycline, chloramphenicol, nitrofurantoin, ristocetin and polymyxin B; and (2) tetracycline, chloramphenicol, erythromycin, nitrofurantoin and colistimethate sodium.

This clinical study shows that the two combinations of antibiotics were not superior to some of their single components. The authors point out that antibiotic antagonism often negates theoretical advantages of multiple therapy. Coly-Mycin Injectable (colistimethate sodium) was one of the single components that was shown to be equal to the combinations and eradicated bacteriuria in two-thirds of the patients.

Theoretical choice of multiple antibacterial therapy has been shown to be no more effective than one well-chosen agent which also offers least patient exposure to possible side reactions, toxicities, allergic manifestations and higher drug costs.

1. McCabe, W. R., and Jackson, G. G.: New England J. Med. 272:1037, 1965.

in gram-negative urinary tract infections often the single well-chosen agent

COLY-MYCIN
INJECTABLE

Coly-Mycin® Injectable

(colistimethate sodium)

Indications: Especially indicated for the treatment of severe acute and resistant chronic urinary tract infections due to sensitive strains of gram-negative organisms. Also indicated in respiratory tract, surgical, wound and burn infections and in septicemia due to sensitive organisms. Particularly indicated when any of these infections are caused by sensitive strains of *Pseudomonas aeruginosa.*

Adverse Reactions: Occasional reactions such as circumoral paresthesias, tingling of the extremities, pruritus, vertigo or dizziness may occur. Reduction of dosage may alleviate symptoms. Therapy need not be discontinued, but such patients should be observed with extra care.

Warning: Patients should be cautioned not to drive vehicles or use hazardous machinery while on therapy.

Precautions: In cases of impaired or suspected renal impairment, use with greater caution and reduce dosage in proportion to extent of impairment. Transient elevations of BUN have been reported. As a routine precaution, appropriate blood studies should, therefore, be made during prolonged therapy.

As with all polypeptides, the possibility of muscular weakness, including apnea, due to inadvertent overdosage or normal dosage in the presence of impaired renal function, should not be overlooked. In cases of apnea, medication should be promptly discontinued and assisted respiration given until serum levels fall and normal breathing is restored.

Other antibiotics, such as kanamycin, streptomycin, dihydrostreptomycin, polymyxin, and neomycin, may also have varying neurotoxic or nephrotoxic potential. They should be used with great caution concomitantly with Coly-Mycin Injectable (colistimethate sodium).

For deep intramuscular injection only.

Dosage: By the I.M. route only, in 2 to 4 divided doses ranging from 1.5 to 5 mg./Kg./day (0.7 mg. to 2.3 mg./lb./day). Average adult dose is 2.5 mg./Kg./day (1.1 mg./lb./day). In the presence of bacteremia, septicemia, or other serious infection, greater than average doses may be required; however, maximum daily doses should not exceed 5 mg./Kg. (2.3 mg./lb.) where renal function is normal.

Not recommended against Proteus.

Colistin is also available (as colistin sulfate) in: Coly-Mycin® Pediatric for Oral Suspension (not for systemic use), and Coly-Mycin® Otic with Neomycin and Hydrocortisone.

Full information is available on request.

CI-GP-69-R2

WARNER-CHILCOTT Morris Plains, New Jersey

U-M Offers Many PG Courses

The Department of Postgraduate Medicine at the University of Michigan offers many courses for physicians.

Following are those offered on a continous basis:

January 17-19—Obstetrics and Gynecology

January 23-25—Pediatrics

February 1-3—Nuclear Medicine

February 6-10—Physiology with clinical Application

February 13-17—Endocrinology and Metabolism

February 20-24—Diseases of the Heart

February 27-March 10—Anatomy (Obstetrics and Gynecology)

March 13-24—Pathology (Obstetrics and Gynecology)

March 20-24—Gastroenterology (given by the American College of Physicians)

March 27-29—Practical Applications of Radiologic Diagnostic Methods

April 10-May 19—Anatomy (Surgical)

April 13-15—Otorhinolaryngology Conference

April 17-19—Ophthalmology Conference

April 17-21—Electrocardiographic Diagnosis

May 2-3—Chronic Obstructive Pulmonary Disease

May 8-12—Recent Advances in Therapeutics

May 15-16—Thyroid Disease

May 17-19—Rheumatology

June—as arranged—Northern Michigan Summer Program

The following courses are to be given on an intermittent basis on the day listed for the dates given below:

January 4-March 29, 1967: Second Session—Clinical Internal Medicine (Wednesdays) Wayne County General Hospital. Both courses in Internal Medicine

January 19-May 4, 1967—Anatomy (Thursdays)

January 24-April 25, 1967—Selected Clinical Topics (Tuesday evenings)

February 15-May 3, 1967—Psychiatry for Pediatricians (Wednesdays)

Complete information about any of these continuing educational courses may be obtained from John M. Sheldon, M.D., Director, Department of Postgraduate Medicine, W5610 University Hospital, Ann Arbor 48104.

Saginaw GP Clinic Day Set for Dec. 8

The Saginaw Academy of the Michigan Academy of General Practice will sponsor its Annual Clinic Day, December 8.

The topic will be "Recent Advancements in the Treatment of Shock."

The speakers will be the Richard C. Lillehei, M.D. group from the University of Minnesota.

Program will start approximately 9:00 a.m. with registration and end at 3:30 p.m.

Detailed information may be obtained from the Chairman, W. C. Averill, M.D., 2110 Morson & State, Saginaw.

GR St. Mary's Hospital Plans Clinic Day

On December 8 Saint Mary's Hospital of Grand Rapids will present a Grand Rounds Clinic Day. The topic is "A Symposium on Rheumatoid Arthritis."

Guest speakers will include Evan Calkins, M.D., State University of New York at Buffalo School of Medicine; Paul R. Lipscomb, M.D., Mayo Clinic; David G. Pugh, M.D., Mayo Clinic; and Bernard M. Wagner, M.D., New York Medical College.

MORE NIH GRANTS ANNOUNCED FOR U-M

During the next seven years the National Institutes of Health will support the 20-bed Clinical Research Unit at the University of Michigan Medical Center with grants totaling about $4,500,000.

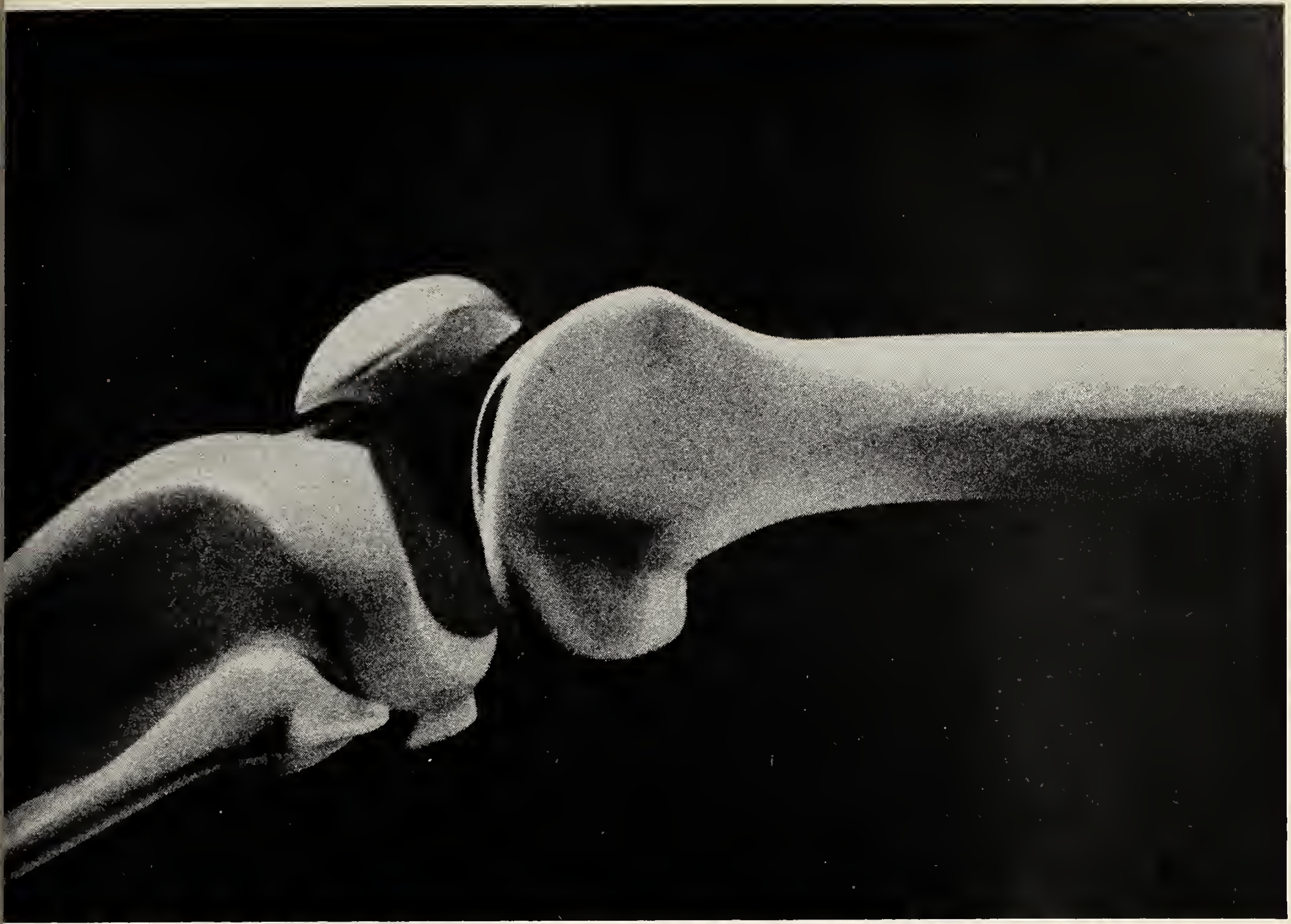
The U-M Clinical Research Unit began treating patients in May 1962. Patients—all volunteers—are accepted for free care into the University when their particular illnesses fit one or another of the 72 research projects carried out by CRU staff members at the hospital.

STATE ALLERGY SOCIETY NOW LED BY BREY

The Michigan Allergy Society recently elected officers for the current year. President is Norman W. Brey, M.D., Detroit; Secretary, Jack Goodwin, M.D., Saginaw; Treasurer, John Lesesne, M.D., Grosse Pointe; Delegate to the Michigan State Medical Society, James A. McLean, M.D., Ann Arbor.

Next year's president will be Julius Greenberg, M.D., Detroit, now President-Elect.

The Allergy Society's officers are also the officers of the Section on Allergy and Applied Immunology of the Michigan State Medical Society.



utazolidin® alka

enylbutazone, 100 mg.
ied aluminum hydroxide gel, 100 mg.
agnesium trisilicate, 150 mg.
matropine methylbromide, 1.25 mg.

Usually works within 3 to 4 days in osteoarthritis

e trial period need not exceed 1 week. In ntrast, the recommended trial period for domethacin is *at least 1 month*.

at's why it's logical to start therapy with tazolidin alka—you'll know quickly whether not it works. And usually, it will.

large number of investigators have re- rted major improvement in about 75% of ses. Some patients have gone into remis- on. Relief of stiffness and pain may be llowed quickly by improved function and solution of other signs of inflammation. And tazolidin alka is well tolerated, especially nce it contains antacids and an antispas- odic to minimize gastric upset.

ntraindications
lema; danger of cardiac decompensation; story or symptoms of peptic ulcer; renal, patic or cardiac damage; history of drug lergy; history of blood dyscrasia. Because the increased possibility of toxic reactions, e drug should be used with greater care in e elderly and should not be given when the tient is senile or when other potent chemo- erapeutic agents are given concurrently. rge doses of Butazolidin alka are contra- dicated in patients with glaucoma.

arning
coumarin-type anticoagulants are given multaneously, the physician should watch r excessive increase in prothrombin time. Pyrazole compounds may potentiate the pharmacologic action of sulfonylurea, sulfonamide-type agents and insulin. Patients receiving such concomitant therapy should be carefully observed for this effect.

Use with caution in the first trimester of pregnancy.

Precautions
Before prescribing, the physician should obtain a detailed history and perform a complete physical and laboratory examination, including a blood count. The patient should be kept under close supervision and should be warned to report immediately fever, sore throat, or mouth lesions (symptoms of blood dyscrasia); sudden weight gain (water retention); skin reactions; black or tarry stools. Regular blood counts should be made to guard against blood dyscrasias.

Adverse Reactions
The most common adverse reactions are nausea, edema and drug rash. Moderately lowered red cell count may sometimes occur due to hemodilution. The drug has been associated with peptic ulcer and may reactivate a latent peptic ulcer. Infrequently, agranulocytosis, exfoliative dermatitis, Stevens-Johnson syndrome or a generalized allergic reaction may occur and require withdrawal of medication. Stomatitis, salivary gland enlargement, vertigo or languor may occur. Leukemia and leukemoid reactions have been reported but cannot definitely be attributed to the drug. Thrombocytopenic purpura and aplastic anemia are also possible side effects.

Confusional states, hyperglycemia, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hepatitis, jaundice and several cases of anuria and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently.

Dosage
The initial daily dosage in adults is 300-600 mg. daily in divided doses. In most instances, 400 mg. daily is sufficient. When improvement occurs, dosage should be decreased to the minimum effective level: this should not exceed 400 mg. daily, and is often achieved with only 100-200 mg. daily.

For complete details, please refer to full prescribing information.
6509-V(B)

Also available: Butazolidin®, phenylbutazone Tablets of 100 mg.

Geigy Pharmaceuticals
Division of Geigy Chemical Corporation
Ardsley, New York BU-3804R

Geigy

Suggests Army Corpsmen Be Kept in Health Work

The war in Viet Nam may be training men who can ease Michigan's and the nation's critical nurse and health service shortage, suggests Professor Walter Burnett, coordinator of MSU's new Health Facilities Management Program.

"The returning medical corpsmen have been involved in actual situations with the wounded, much like our hospital emergencies. When they return from military service, they find they are 'an illegitimate product,' with no status in civilian society. They represent an almost completely overlooked and untapped resource for health service personnel," he added.

Professor Burnett urged that the health facilities of the state and nation examine ways in which the returning corpsmen's talents and training could best be channeled into civilian health services.

U-M Public Health School 25 Years Old

The University of Michigan School of Public Health, largest of its kind in the nation, is marking its 25th anniversary with a year-long observance.

In September, 1941, 15 faculty members and 187 students started the first classes in the School's three departments of Public Health Practice, Epidemiology and Environmental Health.

Today the School has seven departments, a student body of more than 400 and a teaching and research staff of 153.

During its quarter-century, the School has awarded 2,843 professional degrees, and its graduates are serving in all corners of the world.

The degree, Master of Public Health, has been earned by 2,328 men and women. Twenty-five received the Doctor of Public Health degree. Four hundred ninety-nine students received Bachelor- and Master-of-Science degrees.

The 1966-67 anniversary year partly overlaps the University of Michigan's campus-wide Sesquicentennial observance which begins in January. Events planned for next Spring will honor both occasions.

This fall, however, a series of "Silver Anniversary Lectures" will begin to bring prominent scientists and health leaders to the U-M School to review past accomplishments and the future promise of each of the major divisions of public health work.

Points to Challenges Facing Blue Shield

Private health insurance must do a better job than government or face the possibility of a takeover, John McCabe, executive director of Michigan Blue Shield, told the physicians attending the MSMS Annual Meeting.

"Efforts must be redoubled with greater aggressiveness and creativity if the private, voluntary, prepayment system of paying for the costs of medical care is to flourish."

"Let there be no doubt it can flourish only if it does a better job, in every sense, than government. Mere words will not suffice."

Mr. McCabe said, "The private sector must improve its benefit programs to eliminate gaps which will otherwise provide fertile ground for further government involvement. We must develop meaningful techniques in utilization review, and correct inequities and inadequacies in programs, in a manner satisfactory to the medical profession and to the consumer," he said.

"The success of Michigan Blue Shield depends to a great extent on the support and cooperation of the medical profession but, in providing that cooperation, the profession must also consider the attitudes and ideas of those who need and use medical care — the public."

He urged physicians to subordinate personal feelings about Medicare, work with Blue Shield in developing payment techniques and thereby limit government's interference with free medicine.

Symposium on Ovary In Detroit, Nov. 9-10

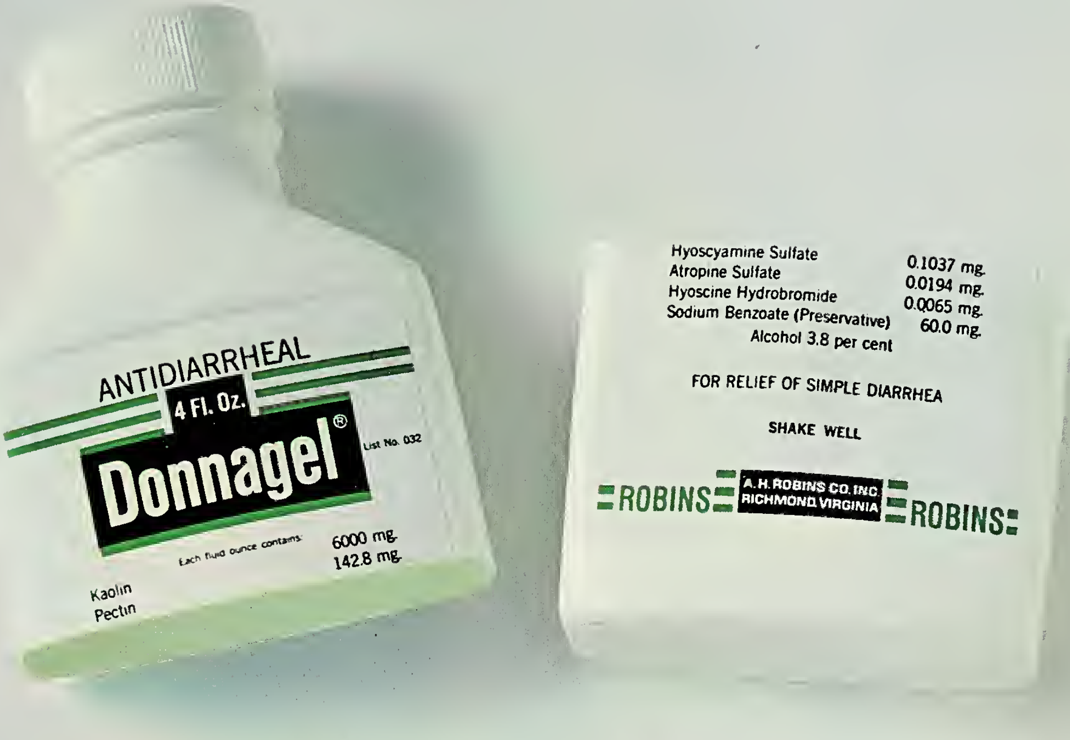
Sponsored by the Department of Obstetrics and Gynecology at Harper Hospital and the Wayne State University School of Medicine, a symposium on "The Ovary: Physiology and Pathology of Reproduction" will be held Wednesday and Thursday, November 9 and 10, at the David Whitney House.

Harold C. Mack, M.D., professor of obstetrics and gynecology, is symposium chairman.

Papers will include:

"Induction of Ovulation," by Carl Gemzell, professor, Akademiska Sjukhuset, University of Uppsala, Uppsala, Sweden.

"The Many Facets of Amenorrhea," by Herbert S. Kupperman, M.D., associate professor of medicine, New York University Medical Center.


ANTIDIARRHEAL
4 Fl. Oz.
Donnagel®
List No. 032
Each fluid ounce contains:
Kaolin 6000 mg.
Pectin 142.8 mg.
Hyoscyamine Sulfate 0.1037 mg.
Atropine Sulfate 0.0194 mg.
Hyoscine Hydrobromide 0.0065 mg.
Sodium Benzoate (Preservative) 60.0 mg.
Alcohol 3.8 per cent
FOR RELIEF OF SIMPLE DIARRHEA
SHAKE WELL
ROBINS
A. H. ROBINS CO. INC.
RICHMOND, VIRGINIA
ROBINS

this part for diarrhea

Kaolin exerts a demulcent action along the gastrointestinal tract and a detoxifying action in the intestines to diminish irritation of the mucosa and lessen hyperperistalsis, nausea and diarrhea.

Pectin exerts its demulcent effect in the entire tract and its detoxifying action primarily in the large bowel to diminish irritation of the mucosa and help restore normal intestinal flora and function.

this part for its discomforts

Belladonna alkaloids as in Donnatal® relieve hypermotility of smooth muscle in the gastrointestinal tract to help control cramping, nausea, and painful straining. Many clinicians consider the belladonna components of Donnagel® to be medicine's most effective depressants of intestinal motility.[1,2] A preparation containing only kaolin and pectin, on the other hand, has "little or no effect on cramps simply because it does not include an agent with antispasmodic action."[3]

Donnagel® treats the whole diarrhea problem.

Available in new 4-ounce plastic bottle on your prescription or recommendation. Also available: Donnagel®-PG (with paregoric equivalent) and Donnagel® with Neomycin. See product literature before prescribing.

References: 1. Kramer, P., and Ingelfinger, F.J.: Med. Clin. N. Amer., *32*:1227, 1948. 2. Hock, C.W.: Clin. Med., *8*:1932, 1961. 3. Winfield, I.W.: Am. J. Gastroent., *31*:438, 1959.

A-H-ROBINS

A. H. Robins Company, Inc.
Richmond, Virginia 23220

"CLEAR THE TRACT" WITH

ughing ahead...
ear the Respiratory Tract with Robitussin.

more than just a slogan, "clear the tract" reflects the dependable ussive-expectorant action of the three Robitussin formulations. ntain glyceryl guaiacolate, the time-tested expectorant reatly enhances the output of lower respiratory tract fluid. sed RTF volume exerts a demulcent effect on the tracheobronchial sa, promotes ciliary action, and makes thick, inspissated s less viscid and easier to raise. Glyceryl guaiacolate is safe, arcotic, and almost universally accepted by patients of all ages.

E TUSSIN ULATIONS	ROBITUSSIN	ROBITUSSIN A-C	ROBITUSSIN-DM
PECTORANT	●	●	●
MULCENT	●	●	●
UGH SUPPRESSANT		●	●
TIHISTAMINE		●	
NG-ACTING hours)			●

FORMULAS

ROBITUSSIN®
in each 5 cc. teaspoonful:

Glyceryl guaiacolate	100 mg.
(Alcohol 3.5%)	

ROBITUSSIN® A-C
(exempt narcotic)
in each 5 cc. teaspoonful:

Glyceryl guaiacolate	100 mg.
Pheniramine maleate	7.5 mg.
Codeine phosphate	10.0 mg.
(warning: may be habit forming)	
(Alcohol 3.5%)	

ROBITUSSIN®-DM
new, non-narcotic
in each 5 cc. teaspoonful:

Glyceryl guaiacolate	100 mg.
Dextromethorphan hydrobromide	15 mg.

Robitussin and Robitussin-DM are available at pharmacies everywhere on your prescription or recommendation.

A. H. Robins Company, Inc. Richmond, Va.

PHOTO:
e No. 89 of the Monadnock, Steamtown
thern Railway pulls a trainload of
enthusiasts through the New England
ryside between Bellows Falls and Chester, Vermont.

A·H·ROBINS

NE OF THE ROBITUSSIN® FORMULAS

Urges Study of Ideas For Better Rural Care

Five proposals of the AMA Council on Rural Health should be reviewed by the MSMS component medical societies which serve rural and urban communities, contends Robert E. Rice, M.D., Greenville, Chairman of the MSMS Committee on Rural Medical Service.

Many MSMS county medical societies can improve the effectiveness of emergency medical care in rural communities, Doctor Rice suggests, if the following five steps are implemented. The AMA Council on Rural Health, Doctor Rice reports, is on record strongly urging that:

"1) Rural communities coordinate their efforts with adjacent towns or urban centers to make a joint analysis of police, fire, ambulance, medical, safety, and other groups to determine existing patterns of response to medical emergencies;

"2) Adjacent rural and urban communities, where feasible, institute a medical service area program for emergency medical transportation facilities and health personnel;

"3) Rural communities in cooperation with town or urban centers of population, where possible, adopt the model ambulance ordinance to give the public a greater voice in the quality of ambulance care. This ordinance proposes standards for ambulance equipment, personnel and operation, liability insurance requirements, maintenance of records, duties of regulatory agencies, and penalties to be imposed if the ordinance is disobeyed;

"4) Non-professional people most frequently called in emergencies — especially police, sheriffs and ambulance crews — should have advanced Red Cross first aid training; and

"5) AMA initiate, in cooperation with state and county medical societies, a continuing campaign directed toward first aid instruction of rural families and particularly young people through the schools, youth organizations, and other educational channels. The objective would be to orient every farm and rural family with respect to proper first aid procedures, especially those relating to serious accidents and life-saving techniques, until medical services can be obtained."

MSMS Chairman Rice reports the AMA Council has agreed that availability of effective emergency medical care and of safe transportation to the nearest physician or hospital for treatment are absolute necessities for every citizen.

A recent study of rural and urban traffic fatalities in California showed that one and one-half times as many people were injured per 1,000 population in traffic accidents in rural counties (under 50,000 population) as contrasted with urban counties (over 500,000 population) and that people injured in rural counties were almost four times as likely to die of their injuries as those injured in urban counties, despite the occurrence of less severe accidents and more survivable injuries.

The higher case fatality ratio in rural areas seemed to be related to the inability to provide adequate first aid procedures and to get the person to a hospital within a reasonable period of time.

Emergency medical transportation and first aid arrangements are also important to farm families because 760,000 farm people are disabled every year in accidents on the farm.

Chason Named Chairman WSU Dept. of Pathology

Jacob L. Chason, M.D., is the new chairman of the department of pathology at the Wayne State University School of Medicine.

Dr. Chason is neuropathologist and chief of pathology at the Detroit General Hospital (formerly Receiving) and is consultant at the Veterans Administration Hospital in Dearborn, Detroit Memorial Hospital, Grace Hospital, Sinai Hospital of Detroit, Wayne County General Hospital, and Oakwood Hospital.

A graduate of the University of Michigan Medical School, Dr. Chason served his internship and residency at Wayne County General Hospital.

Dr. Chason, who had been acting chairman of pathology at the WSU School of Medicine since 1964, joined the WSU faculty in 1949.

* * *

LANSING — The State Department of Education reports that 75 school districts in the state are expected to conduct basic education classes for 16,000 adults this year.

The Adult Basic Education program was conducted in 62 school districts last year, serving 10,000 adults who had completed less than six years of school.

* * *

The American Medical Association Education and Research Foundation loan guarantee program is one of the major sources of support for medical students, interns and residents who need assistance in financing their education and training. Since 1962, the program has guaranteed more than 27,500 loans valued in excess of $32,000,000.

State Auxiliaries Busy

Physicians appreciate the fine community work carried out by the Woman's Auxiliaries across Michigan and the nation.

The recent national convention of the Woman's Auxiliary heard reports of the outstanding projects.

In Michigan, the visits of the MSMS Healthmobile across the state would not have been possible except for the many hours contributed by Auxiliary members as hosts and guides.

Among the contributions in other states are these reported by Wayne County Auxiliary President, Mrs. Harvey (Marcia) Lynn:

"A three-day Health Fair in Massachusetts; a complete eye-testing program for Project Headstart children in Connecticut; picnics and group recreational trips plus other transportation for the physically handicapped, sponsored by the New Hampshire Auxiliary; the Vermont Auxiliary maintained a Summer School and Day Camp for mentally retarded children. In Pennsylvania, medical careers recruitment took the form of Auxiliary sponsored Medicine Assemblies where local physicians told the story of medicine and films dramatized it.

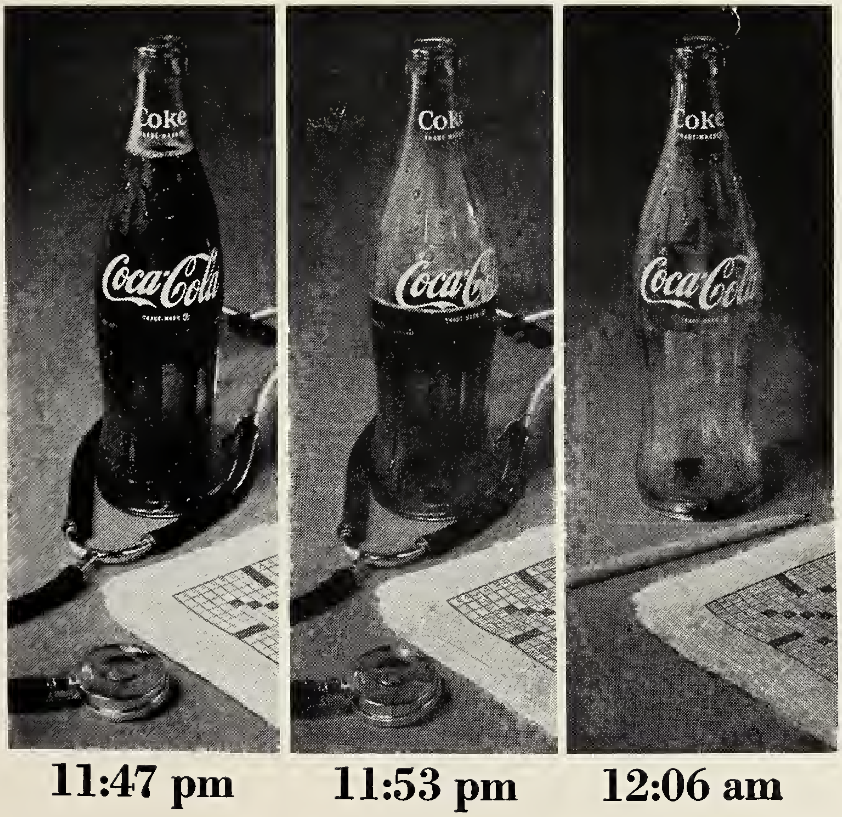
"North Dakota trained ambulance drivers and assistants. Wisconsin did a pilot project in Neurological Organization called *Patterning*. This was to enable retarded children to be more easily taught. Tennessee started a lending library of sickroom supplies and equipment including hospital beds and wheel chairs. The Salvation Army was their answer to the transportation problem."

Urge Physicians Promote New AMA "Health Guide"

The MSMS Public Relations Committee members contend that physicians can promote better health in their communities by acquainting patients and the general public with the American Medical Association's new health manual, **Today's Health Guide.**

More than 250,000 American families have ordered this 640-page easy-to-read book during its first year of publication.

Physicians are urged to purchase a copy of **Today's Health Guide** for their reception rooms and recommend it to their patients. It costs $5.95 and can be obtained by writing AMA, 535 North Dearborn St., Chicago, Illinois, 60610.



The meaningful pause. The energy it gives. The bright little lift. Coca-Cola with its never too sweet taste, refreshes best. Helps people meet the stress of the busy hours. This is why we say things go better with Coke
TRADE-MARK®

vignettes of angina pectoris —
no. 1 in a series:

angina and the surgeon

John Hunter —
British surgeon (1728-1793)

angina of anger

"My life is in the hands of any rascal who chooses to annoy and tease me."[1] So said the great British surgeon and anatomist, John Hunter, realizing that he could not control the anger which precipitated frequent and severe attacks of angina pectoris. According to Mettler: "His statement was no exaggeration. On October 16, 1793, he attended a meeting of the St. George's hospital staff, and, while defending the interests of several students, he was contradicted and thoroughly antagonized. The pains of angina commenced, he started toward another room, gained it, and fell dying into the arms of a physician."[2]

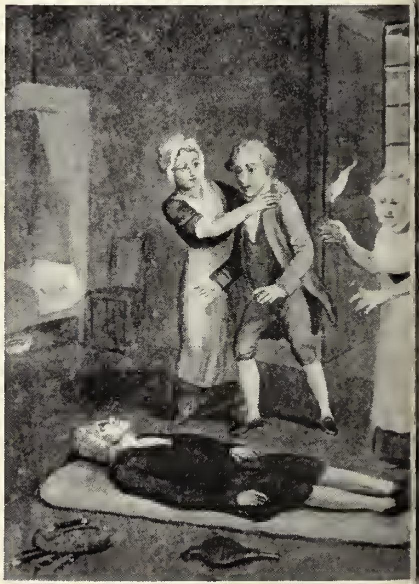
Why Edward Jenner withheld his paper on angina In 1777, at an earlier stage of the condition, Hunter's angina alarmed a favorite pupil, Edward Jenner, who wrote to Dr. Heberden that he feared his teacher was "affected with symptoms of the Angina Pectoris."[3] So concerned was Jenner about his former teacher's emotion-related condition that he deliberately cancelled publication of a paper on angina pectoris, fearing that Hunter would read it, and have "his fears excited by its truly formidable nature."[4]

Severity of angina described

Hunter's brother-in-law, Dr. Everard Home, who witnessed his death and performed an autopsy, gave this account of the later stage of the condition:

"...the pain became excruciating at the apex of the heart; the throa was so sore as not to allow of an attempt to swallow anything and the left arm could not bear to be touched....

"The affections above described were, in the beginning, readily brought on by exercise...but they at last seized him when lying in bed, and in his sleep...."[5]



18th century ancestor of the modern coronary candidate Surgeon, anatomist, pathologist, physiologist, geologist, and teache Hunter had a passion for research which led him to disregard his practice, his health and even the

When the Irish giant O'Brien
ned that Hunter desired his
eton for a museum, he willed
his body be sunk at sea in a
coffin. But Hunter was not to
enied. According to Major, he
bribed the watchers and finally
ined the body at a cost of 500
nds although he had to borrow
money to pay the men."[3]
767, he experimentally inocu-
d himself with gonorrhea and
ilis, treated himself with
cury for three years, and was
arently cured.[5] Hunter had
ngs of inadequacy about his
cation and speaking ability,
this did not prevent him from
g hard driving and abrupt
his colleagues. His competi-
ness with his physician older
her was also well known, and
ed in complete estrangement
veen the two men.[2,3] Today, the
onality traits seen in John
ter are recognized to be impor-
predisposing factors in the devel-
ent of coronary artery disease—
n manifested as angina pectoris.
rding to Friedman and Rosen-
,[6] in a group of men whose be-
or was characterized by intense
ition and competitive drive,
ater than average incidence
ngina pectoris was among those
rmal conditions noted.

rences: 1. Paget, S., cited by Mettler,
.: History of Medicine, Philadelphia,
Blakiston Company, 1947, p. 85.
ettler, C. A.: *Op. cit.*, pp. 84-85.
ajor, R. H.: A History of Medicine,
gfield, Ill., Charles C Thomas, 1954,
, pp. 601-607. 4. Baron, J., cited by
r, R. H.: *Op. cit.*, p. 607. 5. Major, R.
lassic Descriptions of Disease, ed. 3,
gfield, Ill., Charles C Thomas, 1955,
3. 6. Friedman, M., and Rosenman,
.: J.A.M.A. *169*:1286, 1959.

in the modern management of angina pectoris

Peritrate® SA

Sustained Action (pentaerythritol tetranitrate) 80 mg.

Each double-layer, biconvex, dark green/light green tablet of Peritrate SA Sustained Action contains:
pentaerythritol tetranitrate . . . . 80 mg.
(20 mg. in immediate release layer and 60 mg. in sustained release base)

Peritrate (pentaerythritol tetranitrate) is a nitric acid ester of a tetrahydric alcohol (pentaerythritol).

Actions: The exact cause of angina pectoris (that is, the pain associated with coronary artery disease) remains obscure, despite the numerous and often conflicting hypotheses concerning its pathophysiology. Therapy at the present time, therefore, remains essentially empiric. Customarily, clinical improvement has been measured by: reduction in (1) number, intensity and duration of angina pectoris attacks and (2) necessity for glyceryl trinitrate intake for prevention or relief of anginal attacks.

Peritrate SA Sustained Action (pentaerythritol tetranitrate) 80 mg. has been reported in clinical usage to reduce in number and severity the incidence of angina pectoris attacks, with concomitant reduction in glyceryl trinitrate intake.

In the evaluation of Peritrate (pentaerythritol tetranitrate) and Peritrate SA Sustained Action (pentaerythritol tetranitrate) 80 mg. in angina pectoris, clinical improvement has been customarily measured subjectively by reduction in number and severity of attacks and necessity for glyceryl trinitrate intake for prevention or abortion of anginal attacks. Individual patterns of angina pectoris differ widely as does the symptomatic response to antianginal agents such as pentaerythritol tetranitrate. The published literature contains both favorable and unfavorable clinical reports. In conjunction with total management of the patient with angina pectoris, Peritrate (pentaerythritol tetranitrate) and Peritrate SA Sustained Action (pentaerythritol tetranitrate) 80 mg. have been accepted as safe for prolonged administration and widely regarded as useful.

Animal pharmacology: In a series of carefully designed studies in pigs, Peritrate (pentaerythritol tetranitrate) was administered for 48 hours before an artificially induced occlusion of a major artery and for seven days thereafter. The pigs were sacrificed at various intervals for periods up to six weeks. The result showed a significantly larger number of survivors in the drug-treated group. Damage to myocardial tissue in the drug-treated survivors was less extensive than in the untreated group. Pigs rather than dogs were used because their coronary artery distribution more closely resembles that of human beings. Studies in dogs subject to oligemic shock through progressive bleeding have demonstrated that Peritrate (pentaerythritol tetranitrate) is vasoactive at the postarteriolar level, producing increased blood flow and better tissue perfusion. These animal experiments cannot be translated to human behavior

Indications: Peritrate SA Sustained Action (pentaerythritol tetranitrate) 80 mg. is indicated for the relief of angina pectoris (pain associated with coronary artery disease). It is not intended to abort the acute anginal episode but is widely regarded as useful in the prophylactic treatment of angina pectoris.

Contraindications: Peritrate SA Sustained Action (pentaerythritol tetranitrate) 80 mg. is contraindicated in patients who have a history of sensitivity to the drug.

Warning: Data supporting the use of Peritrate (pentaerythritol tetranitrate) during the early days of the acute phase of myocardial infarction (the period during which clinical and laboratory findings are unstable) are insufficient to establish safety.

Precautions: Should be used with caution in patients who have glaucoma.

Adverse reactions: Side effects reported to date have been predominantly related to headache (which may require discontinuation of medication) and gastrointestinal distress which are usually transient with continuation of medication.

Dosage: Peritrate SA Sustained Action (pentaerythritol tetranitrate) 80 mg., 1 tablet immediately on arising and 1 tablet 12 hours later (on an empty stomach).

Additional dosage forms
Peritrate (pentaerythritol tetranitrate)—10 mg. and 20 mg. tablets with or without phenobarbital.

Peritrate with Phenobarbital SA Sustained Action—80 mg. pentaerythritol tetranitrate and 45 mg. phenobarbital.

(**Warning:** Tablets containing phenobarbital may be habit forming.)

WARNER-CHILCOTT
Morris Plains, N. J.

PE-GP-610-2C

AMA Leads Fight Against All Quacks

Since its very beginning the AMA has been an influential force in bringing about measures to ensure greater scientific accuracy, safety and dependability of therapeutic agents. Passage of pure foods, drugs and cosmetics laws stemmed largely from AMA efforts.

As early as 1849, the AMA supported establishment of schools of pharmacy and establishment of a board "to analyze quack remedies and nostrums" and "to enlighten the public in regard to the nature and dangerous tendencies of such remedies." Its Council on Drugs was established in 1905, primarily to police widespread drug advertising which promoted false claims and "secret formulas." It helped establish procedures for thorough testing of drugs and cosmetics.

Today the AMA serves as an information center on therapeutic products and devices. It provides physicians with timely, authoritative information on drugs, including therapy and adverse reactions.

To provide a prompt alert on ill effects, the AMA in 1965 introduced a mechanized reporting system permitting far more rapid exchange of vital information on adverse reactions from drugs and chemicals. This system was set up in cooperation with the Food and Drug Administration, participating physicians and hospitals.

In another new program, the AMA is cosponsoring with the Food and Drug Administration and the Pharmaceutical Manufacturers Association the development of a Registry of Tissue Reactions to Drugs.

WORK OF ASSOCIATIONS MERITS PLAUDITS

Perhaps the many outstanding contributions of associations to our society can best be summed up in the words of Dr. Joseph F. Bradley, Professor of Finance, College of Business Administration, The Pennsylvania State University. Writing in his book, Trade Associations and Professional Business Societies (Pennsylvania State University Press — 1965), Dr. Bradley stated:

"The activities of both trade associations and professional business societies are a helping force in the struggle to realize the aspirations of a free society . . . they are a propellent in promoting the dignity of the individual . . . they are a major force in helping to raise the standards of living through education, simplification and standardization . . . they are a great influence on Gross National Product.

The dramatically new Burdick EK 4 Electrocardiograph

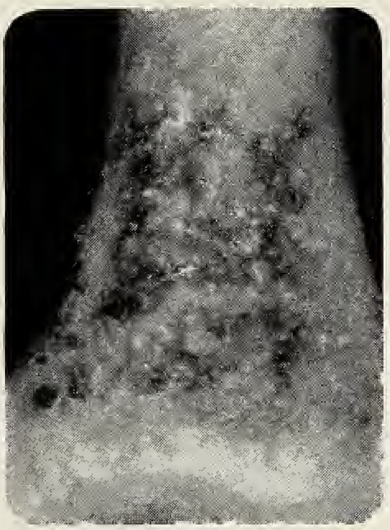
What is a new ECG?

Take a look at the Burdick EK 4! Many important improvements have been made in electrocardiographs in recent years — this is why we invite your closer inspection of the EK 4. Reliability, diagnostic accuracy, and freshness of design are apparent in every detail. Precise recordings of high fidelity • Designed for use with auxiliary equipment, phone transmission, permanent recording of monitoring phenomena • Fast switching from lead to lead • 25-50 mm. speeds • ½ x 1 x 2 standardization on all leads • High frequency response permits use with PC-100 Heart Sound Preamp • Stable • Lightweight. If your present ECG can't offer you these up-to-date features, take a closer look at the EK 4. The EK 4 is a sound investment for your practice or department, and it's backed by Burdick dealer service. Write us. The Burdick Corporation, Milton, Wisconsin 53563.

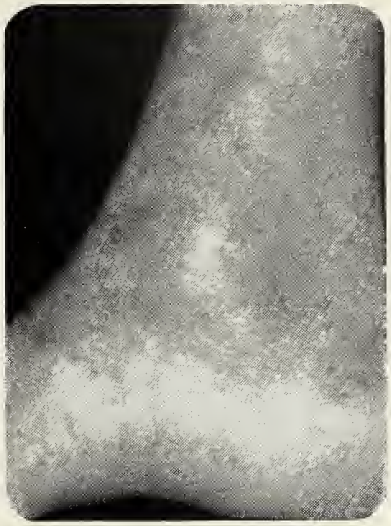
THE G. A. INGRAM COMPANY

4444 Woodward Avenue, Detroit, Michigan 48201
Telephone: TEmple 2-4444

eczema: scourge of childhood



R. R., Age 11—Before treatment—
atopic eczema of long standing



After treatment—with ARISTOCORT
Topical Ointment 0.1% for two weeks

ISTOCORT® Triamcinolone Acetonide Topicals have
ved exceptionally effective in the control of various
ms of childhood eczema: allergic, atopic, nummular,
riatic, and mycotic.
n most cases responsive to topical ARISTOCORT,
0.1% concentration is sufficiently potent. The 0.5%
ncentration provides enhanced topical activity for
ients requiring additional potency for proper relief.

ministration and Dosage: Apply sparingly to the affected
a 3 or 4 times daily. Some cases of psoriasis may be more
ectively treated if the 0.1% Cream or Ointment is applied
der an occlusive dressing.

ntraindications: Tuberculosis of the skin, herpes simplex,
cken pox and vaccinia.

cautions and Side Effects: Do not use in the eyes or in
ear (if drum is perforated). A few individuals react un-
orably under certain conditions. If side effects are en-
untered, the drug should be discontinued and appropriate
measures taken. Use on infected areas should be attended with caution and observation, bearing in mind the potential spreading of infection and the advisability of discontinuing therapy and/or initiating antibacterial measures. Generalized dermatological conditions may require systemic corticosteroid therapy. Steroid therapy, although responsible for remissions of dermatoses, especially of allergic origin cannot be expected to prevent recurrence. The use over extensive body areas, with or without occlusive nonpermeable dressings, may result in systemic absorption. Appropriate precautions should be taken. When occlusive nonpermeable dressings are used, miliaria, folliculitis and pyodermas will sometimes develop. Localized atrophy and striae have been reported with the use of steroids by the occlusive technique. When occlusive nonpermeable dressings are used, the physician should be aware of the hazards of suffocation and flammability. The safety of use on pregnant patients has not been firmly established. Thus, do not use in large amounts or for long periods of time on pregnant patients.

Packages: Tubes of 5 Gm. and 15 Gm.; ½ lb. jar.

PHOTOGRAPHS COURTESY OF M. M. NIERMAN, M.D.

ristocort® Topical Ointment 0.1% and Cream 0.1%, 0.5%
riamcinolone Acetonide

Also available in foam form and with neomycin.

ederle LEDERLE LABORATORIES, A Division of American Cyanamid Company, Pearl River, New York

618-6

It works.

SUMMARY:

TREST® (METHIXENE HYDROCHLORIDE)

relieves G.I. spasm, hyperactivity and associated pain by directly antagonizing the parasympathetic nervous system.

Each tablet contains methixene hydrochloride, 1 mg.

INDICATIONS: Gastrointestinal Spasm and Hypermotility.

CONTRAINDICATIONS: Pyloric obstruction, gastric retention, obstructive organic disease of the gastrointestinal tract, organic cardiospasm, duodenal stenosis, stenosing peptic ulcer, and urinary bladder neck obstruction or prostatic hypertrophy are contraindications to the use of this drug

WARNING Overdosage produces anticholinergic side effects Although the animal reproduction studies are negative, until there is clinical confirmation of safety in pregnancy, this product should not be used in women who may become pregnant unless in the opinion of the physician the benefits outweigh the risks

PRECAUTIONS. Use only with caution in patients with certain types of cardiovascular disease, since anticholinergic drugs may cause arrhythmias Extensive clinical studies of TREST have shown no evidence of glaucoma However, the possibility exists that it can occur since it has been reported as a characteristic side effect of anticholinergic drugs. This product does not replace definitive treatment in organic gastrointestinal disease

SIDE EFFECTS Side effects are generally absent when TREST is used in the recommended dosage of 1 to 2 mg. three times daily Uncommonly, allergy or sensitivity to the drug may be manifested by generalized rash or widespread desquamation. In case of prolonged or massive overdosage, dry mouth, blurred vision, and urinary retention, typical side effects common to anticholinergic drugs, may occur Occasionally, sensitive patients may notice mild dryness of mouth or slight blurring of vision from doses of 2 mg or more Most patients tolerate single doses of 5 mg without such side effects

DOSAGE The usual adult dosage is 1 mg by mouth three times daily If necessary, the dose may be increased to 2 mg three times daily Pediatric dosage has not been determined.

CAUTION· Federal law prohibits dispensing without prescription.

Puts the G.I. tract to rest

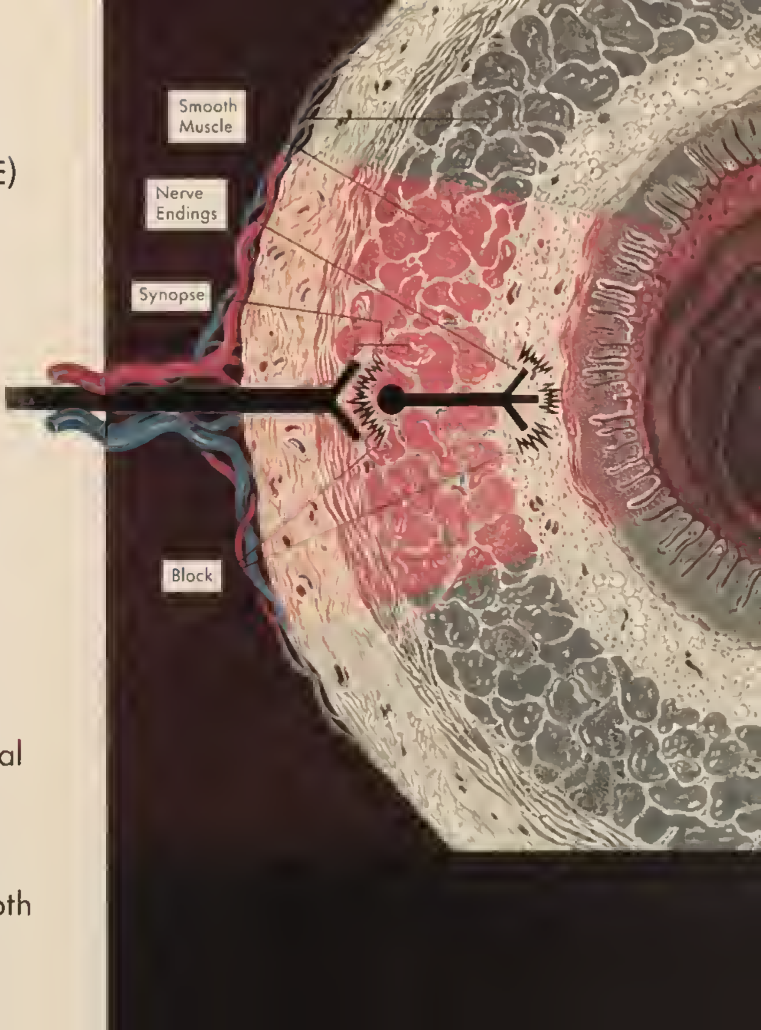
DORSEY LABORATORIES • *a division of The Wander Company* • Lincoln, Nebraska

4848

Printed In U.S.A 10/66

An antispasmodic that antagonizes.

How TREST®
(METHIXENE HYDROCHLORIDE)
works.

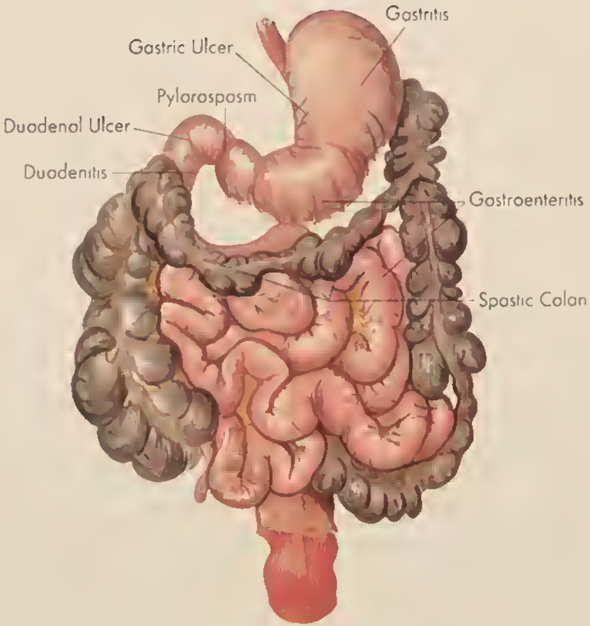

Smooth Muscle
Nerve Endings
Synapse
parasympathetic nerve
Block

TREST (methixene hydrochloride) directly antagonizes the parasympathetic nervous system.

TREST (methixene hydrochloride) blocks the action of acetylcholine formed at the synapses and visceral parasympathetic nerve endings.

Therefore, nerve impulses are prevented from reaching the smooth muscle layer.

TREST® (METHIXENE HYDROCHLORIDE) **relieves gastrointestinal spasm, hyperactivity and associated pain in:**


Gastritis
Gastric Ulcer
Pylorospasm
Duodenal Ulcer
Duodenitis
Gastroenteritis
Spastic Colon

Put the gut to rest
with your prescription for
TREST®
(METHIXENE HYDROCHLORIDE)

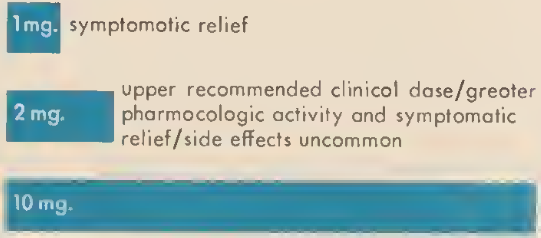
Evidence that TREST®

(METHIXENE HYDROCHLORIDE)

works.

EFFECTIVENESS AND SAFETY

t.i.d. dosage in milligrams



1mg. symptomatic relief

2 mg. upper recommended clinical dose/greater pharmacologic activity and symptomatic relief/side effects uncommon

10 mg.

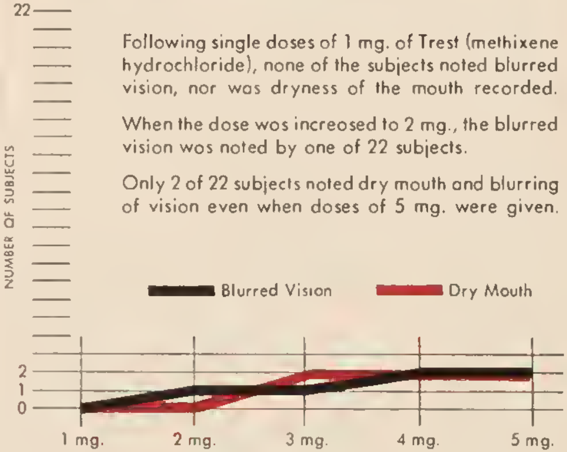
Studies with 372 subjects revealed no adverse effect upon vital organs when dosage was increased 10 times the normally effective dose of 1 mg. t.i.d. for periods up to 2½ years of continued administration.

LACK OF SIDE EFFECTS

Following single doses of 1 mg. of Trest (methixene hydrochloride), none of the subjects noted blurred vision, nor was dryness of the mouth recorded.

When the dose was increased to 2 mg., the blurred vision was noted by one of 22 subjects.

Only 2 of 22 subjects noted dry mouth and blurring of vision even when doses of 5 mg. were given.



Conclusion: Typical atropine-like side effects are not expected when Trest is used 1 mg. t.i.d. These effects are uncommon when the dosage is increased to 2 mg. t.i.d.

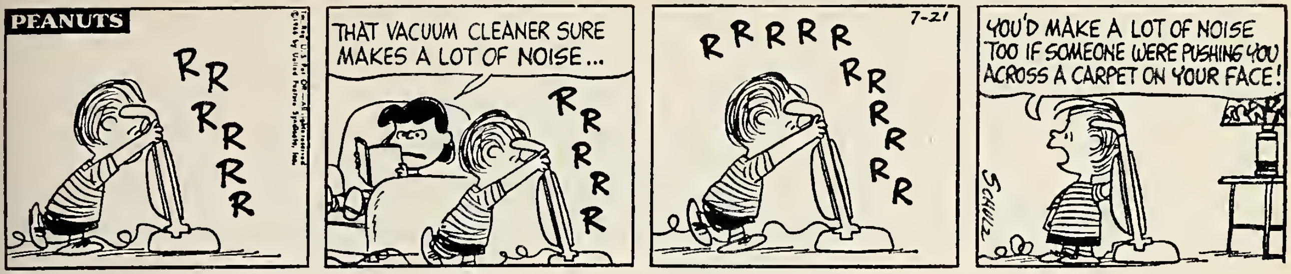
"A highly satisfactory symptomatic response was obtained in 20 of the 23 patients who took 1 mg of methixene hydrochloride (Trest) by mouth three times daily. No side effects occurred at this dosage during administration of the medication itself.

"Methixene hydrochloride (Trest) provides highly gratifying symptomatic relief in a variety of conditions associated with gastrointestinal motility without producing the usual atropine-like side effects and without requiring concurrent barbiturate sedation."

—Martins, J. K
Clin Med 72:1313-1316
(Aug.) 1965

". . . in a series of 47 patients suffering from various types of functional bowel distress. The superiority of this drug (Trest) in dosage of 1.0 mg. three times daily by mouth over the placebo is statistically significant. At that dosage level, side effects were not observed."

—Hufford, A. R.
Clin Med 72:1151-1155
(July) 1965.


PEANUTS
RRRRRRRR
THAT VACUUM CLEANER SURE MAKES A LOT OF NOISE...
RRRRR
7-21
RRRRRRRRRRR
YOU'D MAKE A LOT OF NOISE TOO IF SOMEONE WERE PUSHING YOU ACROSS A CARPET ON YOUR FACE!
SCHULZ

Constructive Dissonance

By T. J. Dillon, M.D.
Paw Paw

If any reader should get the idea that the above portrayed vacuum sweeper could be the Michigan State Medical Society or the American Medical Association being pushed across the carpet of history on its face; you're right!

The "Medical History of Michigan"[1] has a chapter entitled, "Controversies." It concerns problems battled out and resolved, not for the profit of the profession alone but for the good of the "people" by whose pleasure we are licensed and allowed to serve.

Before probing the wounds of the profession for reaction of good or bad humors, may I quote from the introduction to the above Chapter.

> "The great evil of medical societies as they are found generally over the United States is that there is not quarreling enough. They are too peaceful."
>
> "I don't care a ---- whether I fight with the majority or the minority so long as I fight."
>
> by the late but never lacking
> William Brodie. (Wayne Co.)

THE ABUSED

> "Facts that are not frankly faced have a habit of stabbing us in the back." (Sir Harold Bowden)

For the sake of controversy, I wish to state and define a premise: The medical profession feels it is constantly being "stabbed in the back." By definition, the profession feels it is the unjustified target of a socio-economic challenge no other group in the United States must or has faced. We have been singled out unjustly as a "whipping-boy" by all the branches of the state and federal government and the public at large.[2, 3, 4]

Is there a valid reason for these attacks?

I wish to use the recent "crisis" concerning the use of state funds for an Osteopathic School as a point of reference for three debatable allegations to the medical profession.

CHALLENGES UNLIMITED

1—The Michigan State Medical Society is not meeting the health "needs" and "wants" of the citizens of Michigan.

Perhaps it is not the intention or goal of the M.S.M.S. to accomplish this. If true, there is no argument here. The existence of the M.S.M.S. is intended to deal with other things to the exclusion of this tenet.

2—The Medical profession is not meeting the health "needs" and "wants" of the citizens of Michigan. Why should they? Are they not, individually and collectively, franchised by a state agency to meet these purposes. Did not the state, through its socialistic system of education, prepare and subsidize these favored persons to do this service?[5, 6]

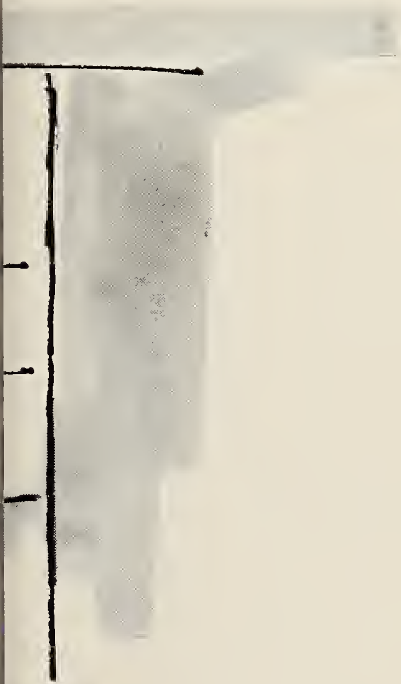
Is this not, at least in part, the true reason why the bill for osteopathic medicine found any favor in the citizens of the state and their elected representatives? Is the osteopathic school question dead? Probably not until more fundamental socio-political problems are faced and resolved.

As prima facie evidence of this challenge, do we not have 2,100 osteopaths in this state? Are not the majority of them content with their role and income from practices as busy as the majority of M.D.'s?

We also have a varied assortment of cultists serving the public. Some are recognized as legiti-

(Continued on Page 1020)

Doctor Dillon is in private practice at Paw Paw. He has obtained permission from Charles M. Schulz, creator of Peanuts, to reproduce the strip used above.



Wait, Annabelle. Mommy hasn't told the doctor yet that you *need* a shot.

e she does, maybe she
n't. But if her problem is
l congestion due to cold
lergy, consider the medi-
n that combines conve-
ce and effectiveness—
histine Melet.

let is especially suitable
e treatment of children. It's
easant tasting, chewable
t that leaves no aftertaste
itty, undissolved particles
in the mouth. It provides decongestant action almost as quickly as a liquid, but assures the accurate dosage of a tablet.

Because Melets are so convenient to carry and so easy to take at any time, adults, too, will appreciate this modern dosage form.

Use cautiously in individuals with severe hypertension, diabetes mellitus, hyperthyroidism or urinary retention. Caution adults who operate machinery or motor vehicles that drowsiness may occur. Each Melet contains phenylephrine hydrochloride 10 mg. and chlorpheniramine maleate 2 mg.

NOVAHISTINE®
MELET

DOW **PITMAN-MOORE** Division of The Dow Chemical Company, Indianapolis

mate healers by having state licensing boards. In addition many others operate within the law but outside any legal control. Why? Because they fill a "need" or "want" that is ignored by the medical profession. More than this, many of these represent an image of a persecuted minority group to the eyes of some prejudiced citizens and legislators.

Too long the might of organized medicine has failed to keep pace with social change. Thus, any persecuted minority group needs to be championed as it fights with the powerful doctors.

This has happened many times in this state and once had a drastic effect on the operation of the University of Michigan Medical School.[7]

Unless it can be demonstrated that we are actively developing resources to meet these "needs" and "wants" now, we shall never be able to discredit such legislators and also biased patrician reformers. The attacks shall continue.

We cannot condemn these opponents for they have come to their bias by legitimate psychological development.[8] You cannot change this. We must produce concrete programs, clearly stated and capable of fulfillment to challenge their bias—immediately. To do this adequately we must also recognize and correct any bias we speak from.

3—The Medical schools at University of Michigan and Wayne U. are not, and have not been using their resources satisfactorily to serve the needs of the people of the state. The needs of the state have been secondary to the needs and wants of the Universities.[9, 5]

Institutional professional rivalry and jealousies may have gone beyond the advantage of spirited competition. Grantsmanship may be necessary to survive. Egocentricity out of touch with the needs of the state could produce legislation detrimental and restrictive to all segments of the profession.

If this is so, then, these schools along with the M.S.M.S. may be participants to the "Stab in the back."

In the past, did these schools and the M.S.M.S. want the third medical school to be developed? Definitely not, even as late as 1963 M.S.M.S. is on record against it.[10] It wasn't until leverage from outside the profession became so great that these schools and M.S.M.S. could ignore the minority of Hannah. Michigan State University College of Human Medicine was then developed—rapidly.

The rapidly advancing legislative onslaught of the D.O.'s minority backed the profession and the schools into a corner and helped to force the issue of support.

Wayne U. and U. of M. plus the M.S.M.S. should have seen to the establishment of the third school twenty years ago—but they and we didn't. We were all too selfish.

(Editor's Note: The editor may not agree with all that Doctor Dillon says in the following essay but he will strongly defend his right to say it. Hopefully such essays will stimulate thought and reappraisal of the place that M.S.M.S. must play in the future development of the control of the practice of medicine by legislation and in the direction to be taken by medical education. George H. Lowrey, Scientific Editor)

If time is to be on the side of the profession we must be truthful. We must be oriented to the future and be able to point out where and how we will realistically be meeting the needs of the state. This applies to the medical schools and M.S.M.S.

Future pragmatic goals, not expediency, mean something to legislators and their constituents. These goals must first be that of service to the constituent and gratification to the profession secondarily.[4, 9]

LEVERAGE

In 1851 a minority group of homeopaths was able to repeal all restrictive legislation regulating the practice of medicine. In 1875, by means of a rider on the annual appropriation to the U. of Michigan, a homeopathy department was established and continued for years until it was again changed by legislative financial inaction.[7] None of this was done by the schools or the M.S.M.S. It was done by the legislators and their constituents—probably a small minority group. For some reason it was not opposed sufficiently. Perhaps everyone thought the profession as a whole needed some type of change.

The armed services will be using D.O.s as medical officers. What will happen when he comes home as a veteran medical officer and still in uniform speaks to the legislative committee for equal representation as a separate discipline in the school and hospital of his choice? Will we have our problems solved by that time?

THE FUTURE

Continuous re-evaluation of the quantity and quality control of health services in the state is indicated. The totality of this thesis is beyond the scope of this essay. Some aspects should be mentioned for purposes of argument and challenge.

(Continued on Page 1024)

SQUIBB NOTES ON THERAPY

MOLECULAR REMODELING—

laboratory exercise or clinical necessity?

More than twenty-five years have passed since the discovery of the diuretic activity of sulfanilamide started pharmacologists on a succession of molecular remodelings to find the ideal diuretic.

Diuresis—a sought-after clinical effect from an unwanted side effect

It started in 1937 when a clinician reported that the administration of a sulfonamide was sometimes accompanied by an unexplainable side effect—metabolic acidosis.[1] Three years later the side effect was explained. The sulfonamide radical of sulfanilamide inhibited carbonic anhydrase,[2] the enzyme responsible for converting carbon dioxide and water to hydrogen ions and bicarbonate ions.

Later, other investigators showed by dog experiments that metabolic acidosis probably resulted when the inhibition of carbonic anhydrase upset the exchange of hydrogen and sodium ions, causing increased excretion of sodium as the bicarbonate.[3]

It was twelve long years after the first report of the unexplainable side effect (metabolic acidosis) that it was finally shown that large doses of sulfanilamide administered to edematous patients were indeed capable of promoting diuresis.[4] However, the possibility of toxic effects from its prolonged use and its relatively weak diuretic action made it impractical for clinical use as a diuretic.[5]

Because the inhibition of carbonic anhydrase seemed to be the key to effective diuresis, investigators began to look for more potent enzyme inhibitors—in the hopes that they would be more effective diuretics.

The most important of these early compounds, acetazolamide, enjoyed several years of fairly wide clinical use.

Its carbonic anhydrase inhibitory activity was several hundred times greater than that of sulfanilamide.[6] The increase in inhibitory activity, however, increased not only the excretion of sodium and bicarbonate ions, but also the excretion of potassium.[7] And, like its predecessor, acetazolamide precipitated mild acidosis. Its prolonged use could result in hypokalemic acidosis.[7]

The 'thiazides'—an answer to the metabolic acidosis caused by carbonic anhydrase inhibition

Despite the fact that the sulfonamide group appeared to be responsible for carbonic anhydrase inhibition which in turn appeared to be responsible for diuresis, investigators began to synthesize compounds with structural alterations to the sulfonamide group.

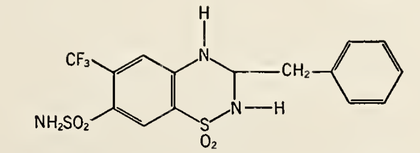
The first major breakthrough came with the synthesis of chlorothiazide. Altering the sulfonamide group did indeed alter the ability of chlorothiazide to inhibit carbonic anhydrase—it was only 1/10th as potent as acetazolamide in inhibiting the enzyme.[8] Despite the drop in inhibitory potency, however, chlorothiazide proved to be an effective diuretic—an observation that led to the conclusion that its diuretic action was due to some mechanism other than its action on carbonic anhydrase.[9, 10]

For effective diuresis, chlorothiazide was administered in daily dosages ranging from 250 to 2000 mg.[11] It increased the excretion of sodium and chloride; and, to a lesser extent, potassium and bicarbonate.[11] The excretion of potassium appeared to be maximal at higher dose levels at which, theoretically, the carbonic anhydrase inhibitory effect is more active.[11] Its prolonged use, therefore, could sometimes result in metabolic hypokalemic, hypochloremic alkalosis.[7]

Naturetin—effective diuresis with more favorable electrolyte balance

Other thiazides followed—with improvements being aimed at two particular areas: 1. attempts to increase diuretic action in relation to the milligram potency of the drug, and 2. attempts at a more favorable sodium/potassium ratio in the urine, i.e., to decrease the excretion of potassium while maintaining the excretion of sodium.[12]

One of these, Naturetin, Squibb Bendroflumethiazide, has made advances on both these points. "By adding a 3-benzyl radical to hydroflumethiazide a rather dramatic reduction in dose range is accomplished. With this drug, effective sodium excretion is obtained with doses between 2.5 and 10 mg., which is a 200 to 1 ratio as compared to chlorothiazide..."[13]



Moreover, due probably to its virtual lack of carbonic anhydrase inhibition, Naturetin (bendroflumethiazide) has been shown to cause less potassium and bicarbonate loss and less alteration in urinary pH than either chlorothiazide or hydrochlorothiazide.

Naturetin is outstandingly effective not only in establishing, but also in maintaining, excretion of retained fluid in edematous patients. And its duration of action is sufficiently prolonged to allow a single daily administration in most patients. Naturetin is also an effective antihypertensive agent.

Contraindications: Severe renal impairment; previous hypersensitivity.

Warning: Ulcerative small bowel lesions have occurred with potassium-containing thiazide preparations or with enteric-coated potassium salts supplementally. Stop medication if abdominal pain, distension, nausea, vomiting, or G.I. bleeding occur.

Precautions: The dosage of ganglionic blocking agents, veratrum, or hydralazine when used concomitantly must be reduced by at least 50% to avoid orthostatic hypotension. Electrolyte disturbances are possible in cirrhotic or digitalized patients.

Side Effects: Bendroflumethiazide may cause increases in serum uric acid, unmask diabetes, increase glycemia and glycosuria in diabetic patients and may cause hypochloremic alkalosis, hypokalemia; cramps, pruritus, paresthesias, and rashes may occur.

Supplied: Naturetin (Squibb Bendroflumethiazide) 5 mg. and 2.5 mg. tablets. Also available Naturetin c̄ K [Squibb Bendroflumethiazide (5 or 2.5 mg.) with Potassium Chloride (500 mg.)]. For full information, see Product Brief.

References: **1.** Southworth, H.: Proc. Soc. Exper. Biol. & Med. *36*:58, 1937. **2.** Mann, T. and Keilin, D.: Nature *146*:164, 1940. **3.** Pitts, R. F., and Alexander, R. S.: Am. J. Physiol. *144*:239, 1945. **4.** Schwartz, W. B.: New England J. Med. *240*:173, 1949. **5.** Friedberg, C. K., in Moyer, J. H., and Fuchs, M.: Edema Mechanisms and Management, Philadelphia, W. B. Saunders Co., 1960, p. 259. **6.** Cumming, J. R.; Tabachnick, E., and Seelig, M., in Moyer, J. H., and Fuchs, M.: op. cit., p. 254. **7.** Werko, L., in Moyer, J. H., and Fuchs, M.: op. cit., p. 188. **8.** Beyer, K. H., Jr., in Moyer, J. H., and Fuchs, M.: op. cit., p. 274. **9.** Maren, T. H., and Wiley, C. E.: J. Pharmacol. & Exper. Therap. *143*:230, 1964. **10.** Earley, L. E., and Orloff, J.: Ann. Rev. Med. *15*:149, 1964. **11.** Fuchs, M., and Mallin, S. R., in Moyer, J. H., and Fuchs, M.: op. cit., p. 276. **12.** Ford, R. V., in Moyer, J. H., and Fuchs, M.: op. cit., p. 290. **13.** cited in Fuchs, M., and Mallin, S. R. (ref. 11): op. cit., p. 283.

Naturetin®
SQUIBB BENDROFLUMETHIAZIDE
to reduce excess fluid
or high blood pressure

SQUIBB 'The Priceless Ingredient' of every product is the honor and integrity of its maker.

Sustained circulatory, respirator
and cerebral stimulation for th

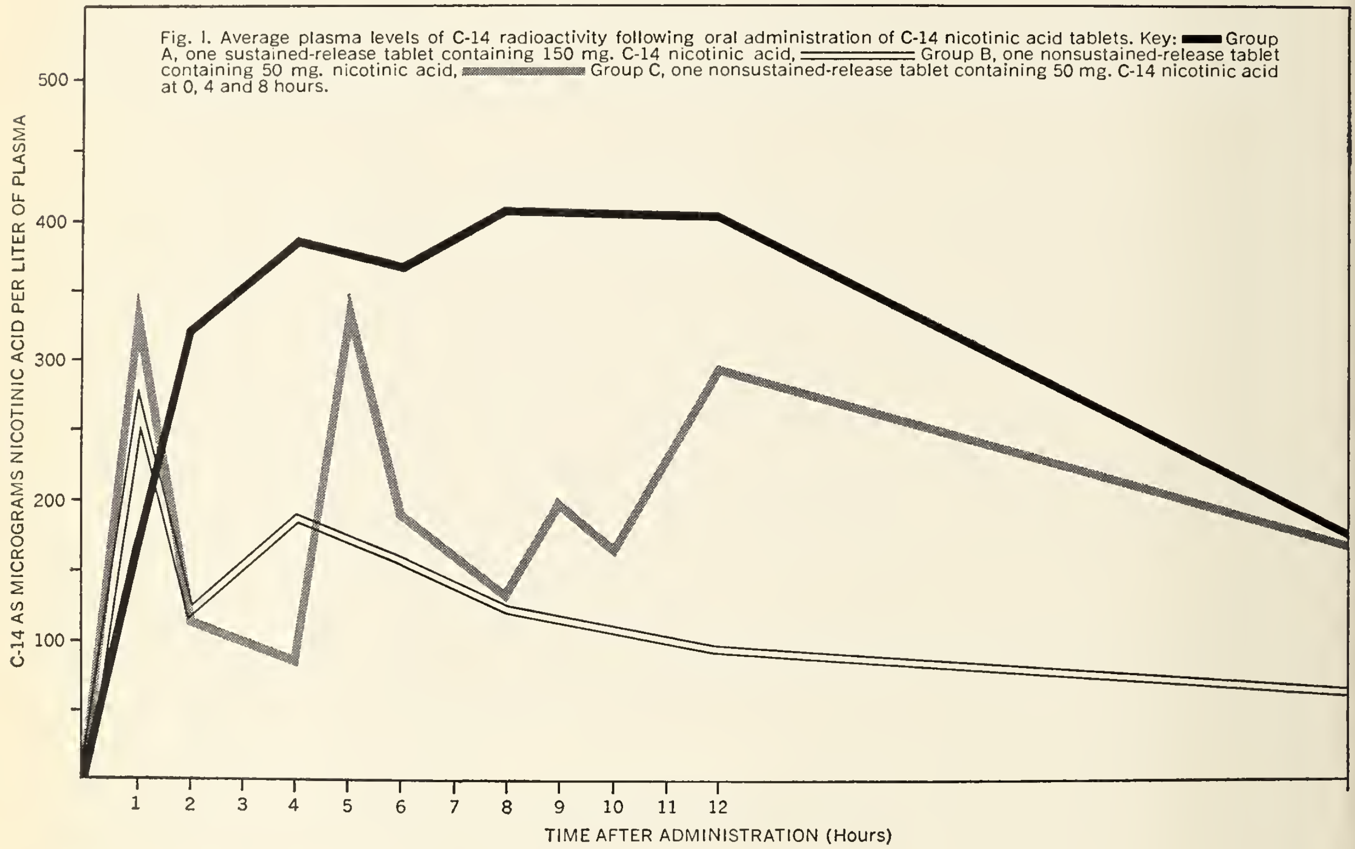


Fig. I. Average plasma levels of C-14 radioactivity following oral administration of C-14 nicotinic acid tablets. Key: ▬ Group A, one sustained-release tablet containing 150 mg. C-14 nicotinic acid, ═══ Group B, one nonsustained-release tablet containing 50 mg. nicotinic acid, ▨ Group C, one nonsustained-release tablet containing 50 mg. C-14 nicotinic acid at 0, 4 and 8 hours.

(fewer absent doses by absent-minded patients)

Human volunteer subjects were administered Geroniazol TT tablets with the nicotinic acid component made radioactive with C-14. Plasma and urine samples were analyzed. (See Figures I and II) The radioactive tracer study substantiated the previous clinical evidence that the release of nicotinic acid from the Geroniazol TT tablet produced a gradual rise in plasma levels to a plateau for a total of 12 hours and more.

Such proven sustained activity makes the management of geriatric patients much easier by minimizing the possibility of neglected doses through absent-mindedness or senile confusion. Therapy *can* be continuous on a daily dose of only one Geroniazol TT tablet every 12 hours.

The gradual release of nicotinic acid in Geroniazol TT will provide the well-known peripheral vasodilatation needed in patients with deficient circulation and with a minimum amount (if any) of "flushing." Also, cerebrovascular circulation is complemented by pentylenetetrazol, long-established as a cerebral and respiratory stimulant.

Geroniazol TT improves the typical, unfortunate, signs of senile confusion. Patients become more alert,

ged and debilitated

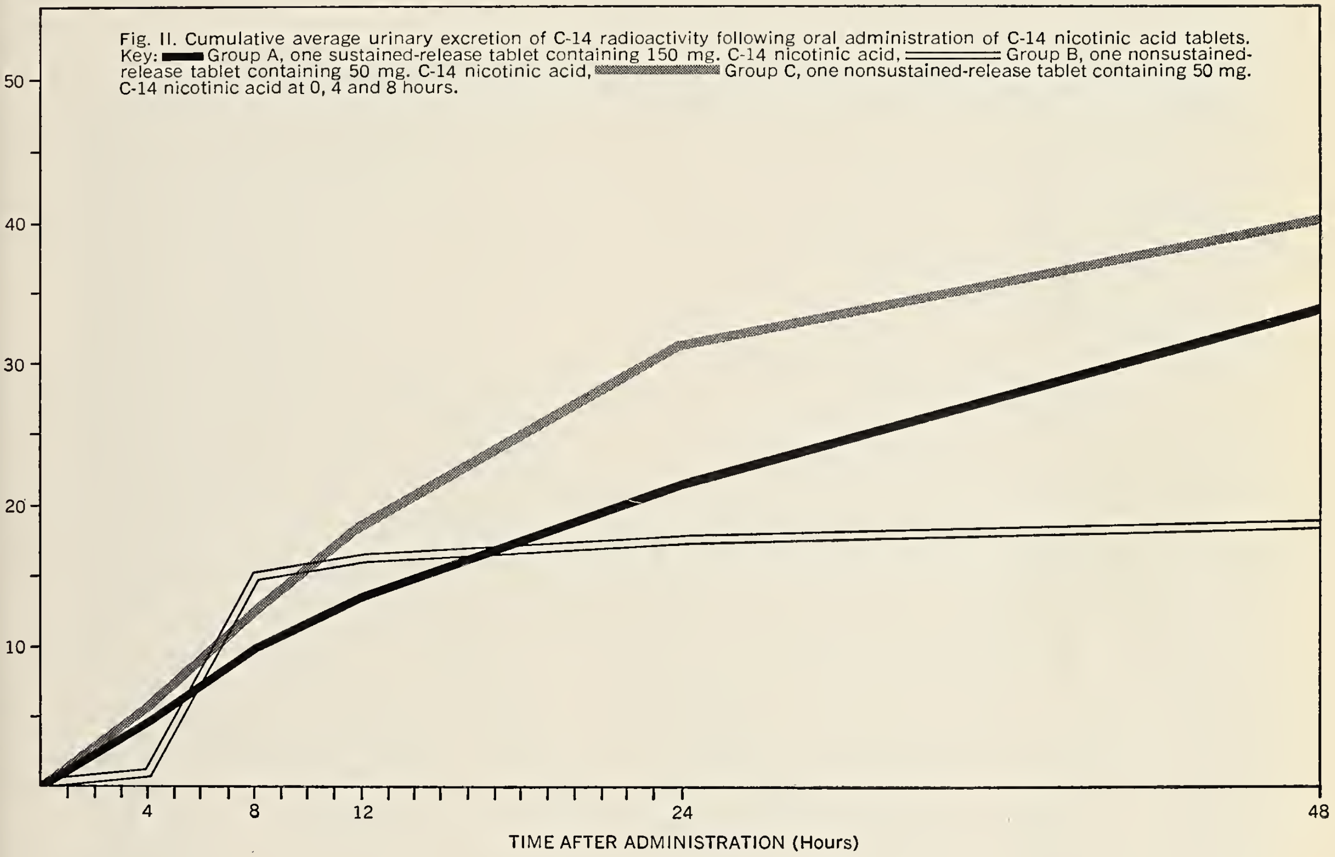


Fig. II. Cumulative average urinary excretion of C-14 radioactivity following oral administration of C-14 nicotinic acid tablets. Key: ▬ Group A, one sustained-release tablet containing 150 mg. C-14 nicotinic acid, ═ Group B, one nonsustained-release tablet containing 50 mg. C-14 nicotinic acid, ▒ Group C, one nonsustained-release tablet containing 50 mg. C-14 nicotinic acid at 0, 4 and 8 hours.

ess confused and moody. Personal care, memory, motional stability, social attention improve. Fatigue, pathy and irritability are reduced.

A prescription for 100 tablets of Geroniazol TT will ermit your patients to enjoy the benefits of time-rolonged nicotinic acid/pentylenetetrazol therapy, t an economical price. Dosage is only one tablet every 2 hours.

ontraindications: There are no known contraindications.

recautions: Exercise caution when treating patients ith a low convulsive threshold.

Side Effects: Side effects are rarely encountered, however due to the vasodilatation effect of nicotinic acid, transitory mild nausea, flushing, tingling and pruritus are possible.

Dosage: One tablet every 12 hours.

Supplied: Prescribe bottles of 100 tablets, to take advantage of recent price reduction.

References: 1. Report by Nuclear Science & Engineering Corp., Pittsburgh, Pa., in files of Philips Roxane Laboratories. 2. Connolly, R.: W. Virginia Med. J. *56*:263 (Aug.) 1960. 3. Curran, T. R., and Phelps, D. K.: Am. Pract. & Digest Treat. *11*:617 (July) 1960.

"First with the Retro-Steroids"
PHILIPS ROXANE LABORATORIES
Division of Philips Roxane, Inc., Columbus, Ohio
A Subsidiary of Philips Electronics and
Pharmaceutical Industries Corp.

Geroniazol® TT

nicotinic acid 150 mg., pentylenetetrazol 300 mg.
Tempotrol® Time Controlled Tablet

Faculty members of the medical schools have and should be active and influential in all affairs of the M.S.M.S.

The M.S.M.S. has not been constructively, progressively and selflessly interested and involved in the quality and quantity of the end product of undergraduate medical education. Is this due to the negation of civic and professional responsibility by the M.S.M.S. in their quest for economic and political advantages?

Re-evaluation of licensing of the healing arts should be carried out. It should not only be to the advantage of the profession but to the entire population.

Periodic relicensing and privilege determination should be defined by compliance with a continuing educational program. This would be a start to control the substandard practitioner in the professions as well as the charlatan outside.

We have arrived at the moment of truth; the tide has turned and twenty wasted years of delaying tactics have been for naught. We are still drifting aimlessly without a goal.[11]

The government and private foundations have prepared programs for regionalization of health care in the state. These could be implemented on mandate of the electorate.

What constructive plan does the M.S.M.S. have to obviate the necessity for such an electoral mandate? Its possibility is now with us.

This state should be covered by a coordinated network of health care centers. They should be preplanned by M.S.M.S. in consultation and coordination with the administration and faculties of the medical schools. This should be one in which the public and the private sector of medicine can both thrive.

The medical and clinical excellence of the teaching center needs to be brought into the smallest health center daily.

The schools and M.S.M.S. will both need to become more selfless. If not, we will not be able to enjoy the luxury of such squabbles as to who will get the biggest cut of the relative value scale or appropriations.

The least we can do is to show a positive program for future health care to both the minority and majority leaders of the legislative bodies. It must be a practical program to meet the "needs" and "wants" of their constituents as far into the future as possible to project.

The situation we face today cannot be as bleak as that faced in the 1930s by the visionaries of the Blue Plans. The question remains if there are enough men of the same calibre and insight in organized medicine to face reality as it is, not as we would like to believe it to be?[12]

BIBLIOGRAPHY

1. Medical History of Michigan; two vols., The Bruce Publishing Company, Minneapolis and St. Paul, Minn. 1930. (Auspices of Mich. State Med. Soc.)
2. McGillicuddy, O.B.: President's Message, "Michigan Medicine" vol. 64, no. 1, page 3, Jan. 1965.
3. Swanson, E.C.: "Blurring of the Mirror". "Michigan Medicine", vol. 64, no. 1, page 29-32, Jan. 1965.
4. Sherman, S.R.: "Criticisms Facing Medicine", "Michigan Medicine", vol. 64, no. 5, page 354-357. May 1965.
5. Michigan Medical History; vol. 1; page 473, 2nd paragraph; page 475, last ½ of 1st paragraph. (see No. 1 above)
6. Hubbard, Jr., W.N.: "One Hundred Years Ago and Hence". "Michigan Medicine", vol. 64, no. 9; page 686, last 5 paragraphs, Sept. 1965.
7. Michigan History of Medicine, vol. 1; page 536, 4th paragraph, Homeopathy Rider. (see No. 1 above)
8. One Union's Views, "As Others See It"; A.M.A. News of July 25, 1966, page 4.
9. Michigan History of Medicine; vol. 1; page 554, last paragraph; Curtis, Arthur C. is quoted from May, 1927 number "Journal Mich. State Med. Society".
10. Action of the House of Delegates, 1962 session. Michigan State Medical Society.
11. Appel, J.Z.: "President's Report to Delegates": JAMA vol. 197, no. 2, page 93; July 11, 1966.
12. Adler, S.: "Ambitious Goals—", Mich. Med. vol. 64, no 9, page 690, Sept. 1965.

Established 1924

MERCYWOOD HOSPITAL

4038 Jackson Road *Conducted by Sisters of Mercy* Ann Arbor, Michigan

Telephone — 313 663-8571

Mercywood Hospital is a private neuro-psychiatric hospital licensed by the Michigan Department of Mental Health. Mercywood specializes in intensive, multidisciplinary treatment for emotional and mental disorders.

Accredited by the Joint Commission on Accreditation of Hospitals and the National League of Nursing. A full Blue Cross participating hospital.

Certified for: Medicare and M.A.A. programs.

PSYCHIATRIC STAFF

Robert J. Bohro, M.D.
Deon P. Corron, M.D.
Francis M. Doignoult, M.D.
Gordon C. Dieterich, M.D.

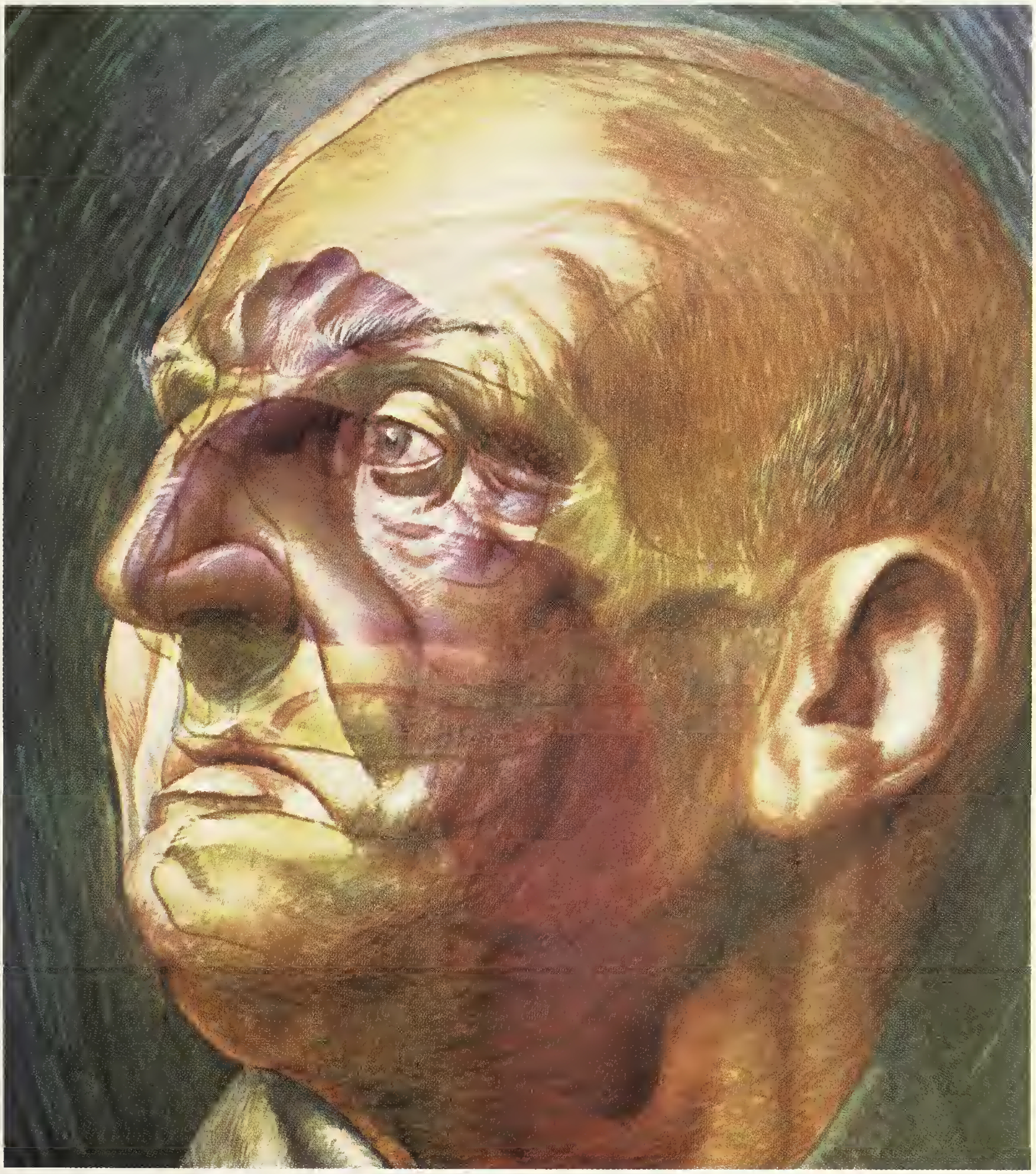
Stuart M. Gould, Jr., M.D.
Leonard E. Himler, M.D.
Stephen C. Mason, M.D.

Richard D. Watkins, M.D.
Rudolf E. Nobel, M.D.
Sydney Joseph, M.D.
James R. Driver, M.D.

fall 1966

DORSEY Season

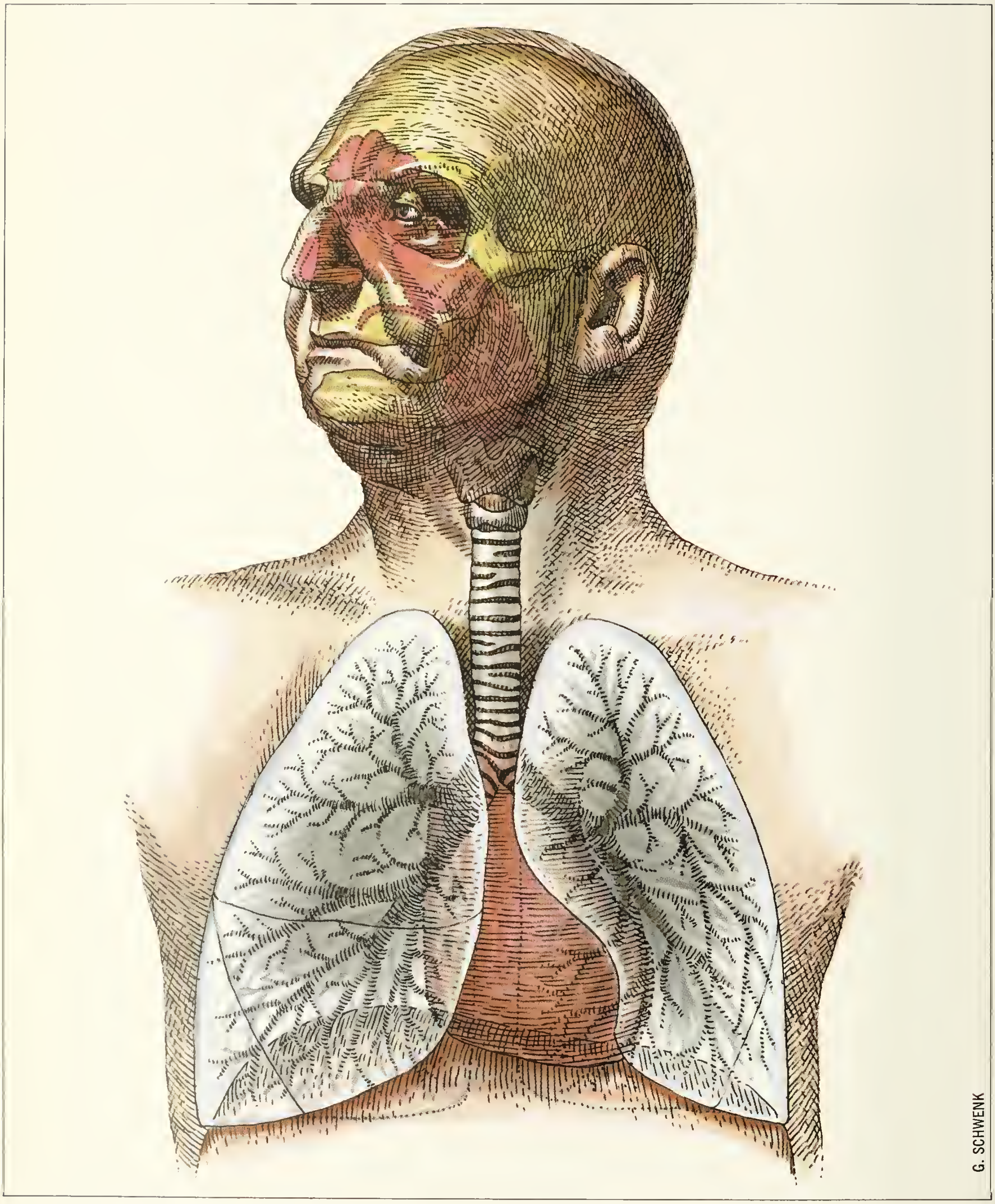
A journal within a journal published quarterly in the interests of better medicine by Dorsey Laboratories, a division of The Wander Company, Lincoln, Nebraska. Address communications to Raymond C. Pogge, M.D., Director of Medicine.



this issue: the common cold and the aging patient

the common cold and the aging patient

Louis J. Vorhaus, II, M.D., F.A.C.P.



Effects of aging on the anatomic and physiologic aspects of the respiratory apparatus.

The chest becomes more fixed, less mobile and less elastic as the bronchial walls and thoracic ligaments lose elasticity. The diaphragm and intercostal muscles atrophy and weaken. The lungs become smaller, flabbier and weigh less, decreasing vital and total lung capacity, increasing residual volume and the alveolar dead space.

Sir William Osler described pneumonia as the welcome friend of the aged patient, because the patient with pneumonia usually died quietly. But today, the well-informed physician is an even better friend of the aging patient, since it is better to live than to die, no matter how quietly.

One of the first avenues of approach in the control of the hazards of respiratory disease in the aging patient is prompt and proper attention to the common cold or upper respiratory infection. The common cold may be the first step in the relatively short path to lower respiratory infection, broncho-pneumonia and death. This train of events occurs frequently among older persons. Indeed, pneumonia is one of the most common causes of their admission to hospitals and ranks high on the list of geriatric killers. Colds are more debilitating in elderly people and the aged are more likely candidates for secondary infections such as sinusitis and bronchitis. These infections, in turn, are more prone to lead to bronchopneumonia, because of lowered resistance and anatomic and physiologic changes in the lungs of the elderly.

What is different about the respiratory tree of an aged person and that of an otherwise healthy younger adult? Aging certainly takes its toll on all parts of the body, affecting both anatomic and physiologic aspects of the respiratory apparatus. These changes are in part due to the wear and tear that occurs over the years; the repeated bouts of respiratory infection, long exposure to atmospheric pollutants, to occupational inhalants, smoking, malnutrition, obesity, inactivity and the development of other diseases which may affect the lungs.

With the passage of years, the lungs change. They become scarred and emphysematous and lose their compliance. The whole chest becomes more fixed, less mobile and less elastic.

The anatomic changes that occur in aging render the lungs less efficient. Tests of pulmonary function in senescence show a deterioration characterized by a decrease in vital capacity and total lung capacity, an increase in residual volume and alveolar dead space. Maximum breathing capacity is reduced and uniformity of ventilation deteriorates. These problems are often aggravated by the obstructed breathing, fever and secondary infection associated with the common cold, placing an additional stress on the entire cardiopulmonary reserve.

In addition, the efficiency of a cough is below par in older persons even though they are in good health. This is partly due to the decreased respiratory excursions and distensibility of the chest wall, and partly from loss of elasticity of bronchial walls which tend to make them collapse in a cough.

The elderly patient's resistance to infection is often reduced. Nutritional deficiencies are more common in aged people. There is some evidence to indicate that their capacity to respond to stress is less efficient. Finally, there is often relatively meager symptomatic response to acute disease. The absence of obvious or dramatic clinical signs and symptoms of severe illness is particularly dangerous because, coming as it

(concluded on following page)

it's a comforting thing to know

For postnasal drip, clogged ears and stuffed and runny noses

Triaminic® timed-release tablets

keeps patients comfortable 'round the clock. 24-hour decongestion on just a single tablet dosed morning, midafternoon and at bedtime. Patients regain senses and can breathe, smell and taste again.

Triaminic. Isn't that a comforting thing to know?

Each timed-release tablet contains:

Phenylpropanolamine hydrochloride	50 mg.
Pheniramine maleate	25 mg.
Pyrilamine maleate	25 mg.

Side effects: Occasional drowsiness, blurred vision, cardiac palpitations, flushing, dizziness, nervousness or gastrointestinal upsets. Precautions: The patient should be advised not to drive a car or operate dangerous machinery if drowsiness occurs. Use with caution in patients with hypertension, heart disease, diabetes or thyrotoxicosis.

(Advertisement)

does in a person whose defenses are weakened both locally and systemically, pulmonary disease may progress rapidly to irreversible stages before medical attention is sought. Respiratory infection is especially hazardous because the aged patient responds badly to hypoxia. Not only is his response to oxygen lack impaired, but the work of breathing, due to decreased compliance of the lung and increased stiffness of the thorax, is markedly augmented.
Many patients late in life are in a precarious and delicate cardiopulmonary balance which is easily decompensated from relatively minor insults such as colds and upper respiratory infections.

For all of these reasons, geriatricians long have stressed the importance of preventing respiratory insults. Today we have better ways of treating respiratory infection, improved techniques for clearing the lungs and bronchial tubes of secretions and better understanding of ways of improving ventilation. We possess a broader spectrum of antimicrobial agents including newer ones to deal with previously resistant organisms. Even so, the death rate from pneumonia is high in older people, and it is preferable to avoid the disease than to treat it. To do so, attention must be paid to the general maintenance of good health and all that implies, as well as to the prevention, elimination and treatment of associated conditions that predispose to or cause pneumonia such as chronic upper or lower respiratory infection, respiratory allergy, chronic sinusitis and exposure to inspired irritants.

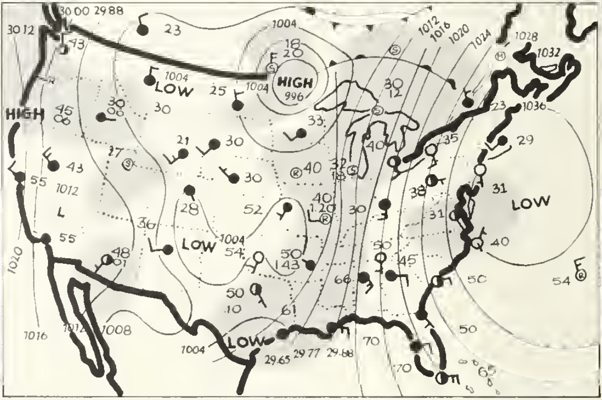
Colds and other minor respiratory infections, which favor the development of broncho-pneumonia, should be treated vigorously and promptly, particularly those patients whose aging process has been accompanied by the development of chronic pulmonary disease. Upper respiratory passages should be cleared with decongestants. Sinuses should be drained adequately. And, when indicated, appropriate antimicrobial therapy should be instituted before serious infection of the lower respiratory tree supervenes.

In decades past it was understandable that physicians welcomed pneumonia for the aged patients because it offered them a quiet and peaceful demise. Today we recognize that in many cases, peaceful as it may have been, such deaths were often avoidable. With the current knowledge and understanding of the problems that respiratory infections impose on aging people, vigilant medical attention can often restore them to a vigorous, rewarding and productive life so that the many opportunities that exist today for people to enjoy their golden years are realized and not stolen by untimely death.

references

1. Steiglitz, Edward J., Geriatric Medicine, Medical Care of Later Maturity, 3rd edition, J. B. Lippincott Co., Philadelphia, 1954. 2. Norman, J. R., Schweppe, I. H., Salazar, E. and Knowles, J. H., Lung Volumes and Aging, Journal of the American Geriatrics Society, 12, pp. 38-47, January 1964. 3. Penman, Robert W. B., Hypoxia and Respiratory Failure, Geriatrics, 18, 807-814, November 1963. 4. Middleton, William S., Some Medical Dissections on Aging, Geriatrics, 18, 168-73, March 1963. 5. Cole, M. B. and Roberts, F. E., Clinico-Pathologic Study of Emphysema, Journal American Geriatrics Society, 12: 415-419, May 1964. 6. Horton, Glenn, Testing of Pulmonary Function, Geriatrics, 17:73-81, February 1962. 7. Banyai, Andrew L., Cough and its Management in Elderly Patients, Geriatrics, 14:621-630, October 1959. 8. Howell, T. H. and Piggot, A. P., Morbid Anatomy of Old Age, Geriatrics, 8:267-72, March 1953.

Weather Forecast Throughout the Nation



RAIN TURNING TO SNOW, INCREASING WINDS AND DROPPING TEMPERATURES FOLLOWED BY COUGH, CONGESTION AND PAIN

Tussagesic® provides up to 24-hour coverage of the tough cold with a single timed-release tablet dosed morning, midafternoon and at bedtime. Coughs are broken up, runny and stuffed noses are cleared and pain is relieved.

Each Tussagesic® timed-release tablet contains:

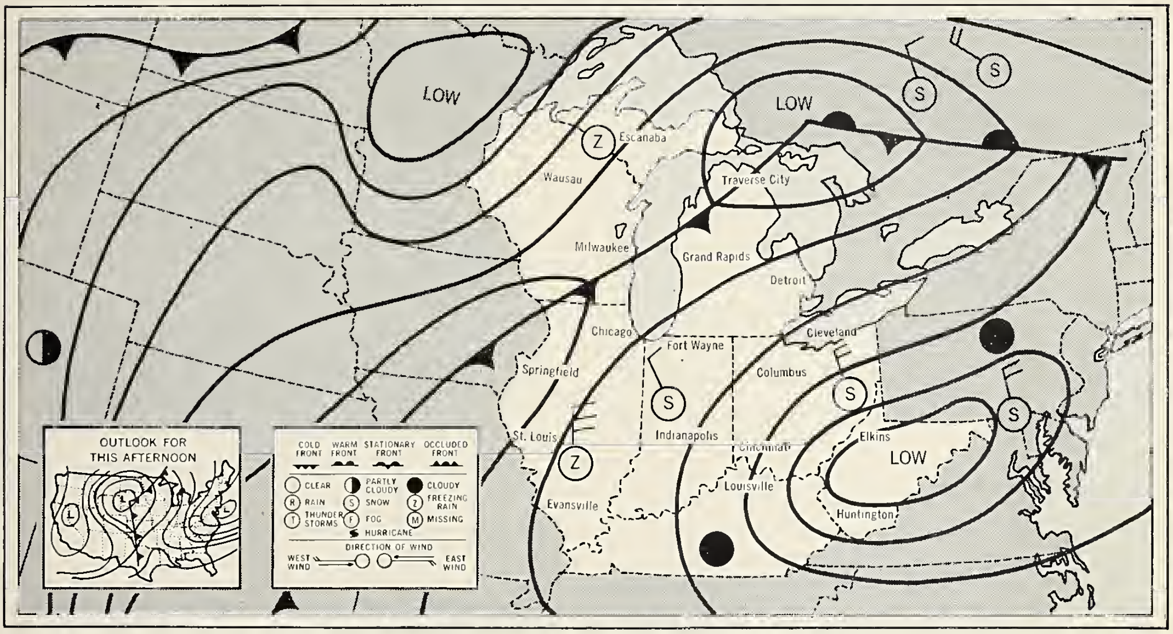
Triaminic® (phenylpropanolamine hydrochloride 25 mg.; pheniramine maleate 12.5 mg.; pyrilamine maleate 12.5 mg.)	50 mg.
Dextromethorphan hydrobromide	30 mg.
Terpin hydrate	180 mg.
Acetaminophen	325 mg.

Side effects: Occasional drowsiness, blurred vision, cardiac palpitations, flushing, dizziness, nervousness or gastrointestinal upsets. Precautions: Patient should not drive a car or operate dangerous machinery if drowsiness occurs. Except under professional care, do not give to patients under 12 yrs. or those who have persistent cough, high fever, heart or thyroid disease, hypertension or diabetes or use for more than 10 days.

(Advertisement)

REGIONAL WEATHER FORECAST

Severe Snow Storms, Strong Winds and Bitter Cold Followed by Cough, Stuffed and Runny Noses and Aches and Pains.


LOW
LOW
LOW
Escanaba
Wausau
Traverse City
Milwaukee
Grand Rapids
Detroit
Chicago
Fort Wayne
Cleveland
Columbus
Springfield
Indianapolis
St. Louis
Cincinnati
Elkins
Louisville
Evansville
Huntington
OUTLOOK FOR THIS AFTERNOON
COLD FRONT
WARM FRONT
STATIONARY FRONT
OCCLUDED FRONT
CLEAR
PARTLY CLOUDY
CLOUDY
RAIN
SNOW
FREEZING RAIN
THUNDER STORMS
FOG
MISSING
HURRICANE
DIRECTION OF WIND
WEST WIND
EAST WIND

Tussagesic breaks up coughs, quickly clears stuffed and runny noses and relieves aches and pains. Provide coverage of the tough cold for up to 24 hours with just a single timed-release tablet dosed morning, midafternoon and at bedtime.

each

Tussagesic®

timed-release tablet contains:

Triaminic® (phenylpropanolamine hydrochloride 25 mg., pheniramine maleate 12.5 mg., pyrilamine maleate 12.5 mg.)	50 mg.
Dextromethorphan hydrobromide	30 mg.
Terpin hydrate	180 mg.
Acetaminophen	325 mg.

Dosage: Adults—1 tablet, swallowed whole to preserve timed-release feature, in morning, midafternoon and at bedtime. Side effects: Occasional drowsiness, blurred vision, cardiac palpitations, flushing, dizziness, nervousness or gastrointestinal upsets. Precautions: The patient should be advised not to drive a car or operate dangerous machinery if drowsiness occurs. Use with caution in patients with hypertension, heart disease, diabetes or thyrotoxicosis.

DORSEY LABORATORIES · *a division of The Wander Company* · **LINCOLN, NEBRASKA**

Art and Medicine: The Art Of Käethe Kollwitz

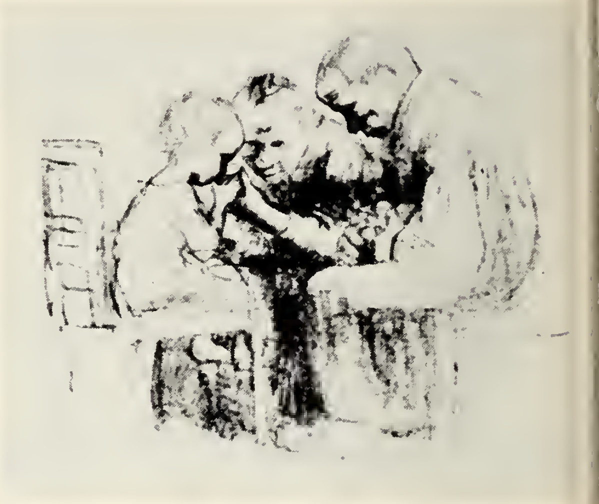
(Editor's Note: This article was written by Ralph I. Fried, M.D., Cleveland pediatrician, for the Ohio State Medical Journal and is printed in Michigan Medicine with the permission of the author and publisher.)

Great art has a twofold meaning for physicians. It is not only a thing of beauty to be viewed and admired but a revelation of how a sensitive human being reacts to some of the basic experiences of life — a matter which daily concerns each of us in the care of our patients.

The prime source for learning the truth about these feelings are the free expressions of human beings unrestrained by civilized veneers. The mores of primitive societies, the behavior patterns of little children, natural and induced dreams and the creations of genius provide a rich reservoir of study for the scientist interested in this subject. The basic truths of human behavior are expressed in the poetry of the Old and New Testaments and in Shakespeare. Great creative artists have been defined as individuals with strong inner drives and with the talent to transmute their id into the form of color design and composition. From the caves of Lascaux to the surrealism of de Chirico, beautiful pictures open the window to the soul of a sensitive human.

Such an artist was Käethe Kollwitz. She dwelt in a country that produced Goethe, Beethoven, Heine, and National Socialism. She was imbued with a sense of liberalism by her family and yet she existed in a society tinged with the tyrannies of a dying feudalism and a resurgent totalitarianism. Deeply sensitive, opposed to injustice and indignant of the hypocrisies of civilized life, she herself became the victim of the cruelest of tragedies perpetrated by the brutal forces rampant in her country.

She poured forth her feelings in her art. Poignant, somber, powerful, the drawings of Käethe Kollwitz are at the same time beautiful and revealing of human reaction to great events. We, as doctors, have a special affinity for her work since her husband was a physician and the influence of his work and his patients is mirrored in her art. Pediatricians find an even closer bond of interest, not only because many of her drawings are of direct pediatric interest but because Käethe Kollwitz in her lifetime, espoused many liberal, humanitarian and idealistic causes identified with human welfare that have been part of the warp and woof of pediatrics.



"Visit to the Children's Hospital"

Käethe Kollwitz was born in Königsberg, Germany, in 1867. Her grandfather had formed a progressive religious group known as the Free Congregation. Her father who had been a mason became pastor of this congregation. These two people were undoubtedly responsible for inculcating her with the liberal principles that were to guide her life.

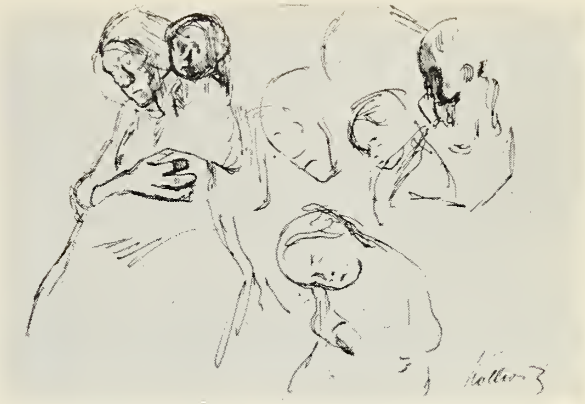
She became engaged to Karl Kollwitz, a medical student, at age 17 but her father persuaded her to study art in Munich for one year. In 1891 Dr. Kollwitz received an appointment to a tailor's Krankenkasse, so he and Käethe were married and moved into 25 Weissenburger Strasse, Berlin N. 58 which was to be their home until destroyed by the bombing of World War II.

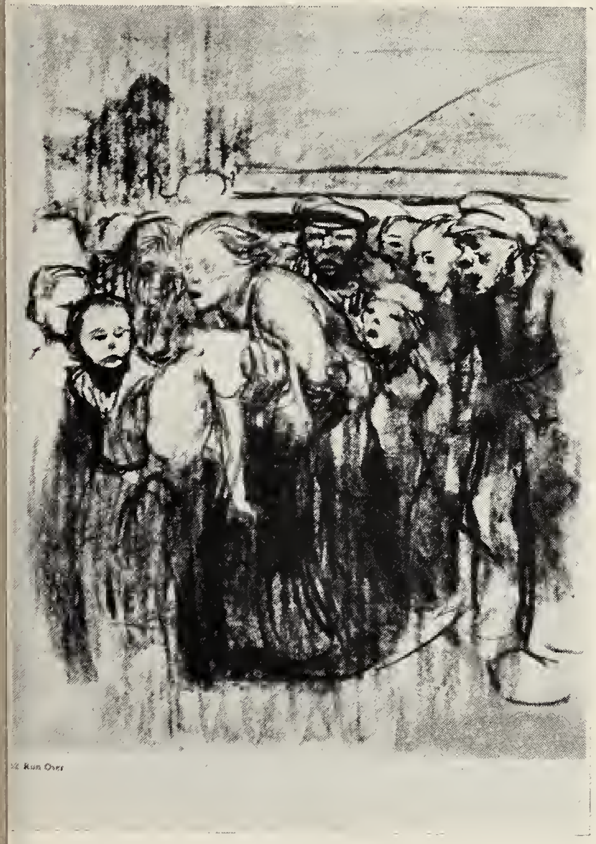
Berlin and World War I

In two short years she began to receive artistic recognition. The social aspect of her work became more and more apparent. She gained insight into the miseries of the workers because this was the milieu in which she lived. She was greatly influenced by classical music and the classic writing of such authors as Zola, Gorky, Dostoievsky, Tolstoy and others. Her initial great work was "The Cycle of the Weavers" which was based on the doomed revolt of the Silesian Weavers. This work was proposed for a gold medal but this was interdicted by Kaiser Wilhelm II. This small disappointment was only a harbinger of sorrows to come. Her life was replete with tragedy, her art was dark and somber, reflecting the bitter events of her life.

She was at first bewildered by the advent of World War I, never having experienced the events of war. She was swept out of her initial melancholy by the enthusiasms of the young Germans, including her beloved son Peter. The death of Peter in Flanders was a crushing blow and in 1918 when Richard Demel called for the best men to volunteer for a last resistance she publicly opposed his position in an essay, "Seed for planting must not be ground" (Goethe). This was followed by many posters and drawings depicting the effect of war on children: *Vienna is Dying, Save its Children!*—1920; *Germany's Children Starving,*—1924; *Bread,*—1924; *Never Again War,*—1924.

In 1919 Käethe Kollwitz was elected to the Prussian Academy and was given the title of Professor. She became interested in sculpture as a medium and during this period she created the beautiful and moving "The Parents" as a memorial to the fallen Peter. This was dedicated in the Military Cemetery at Roggevelde, near Dixmuiden. Many drawings, lithographs and etchings were created during these years, many on subjects with a direct medical interest. A partial list includes: "At the Doctors (Schwangere)"; "Run Over"; "Playing Forbidden"; "Mother and Sick Child"; "Parents with Sick Child"; "Alcohol"; "Hand of Death"; "Waiting Room at the Children's Doctor."


"Waiting Room at the Children's Doctor"



"Run Over"

Artistic Triumph and Personal Despair

When the Nazis assumed power in 1933, she was predictably stripped of her title and prerogatives and her art was banned and classed as "degenerate." Only her prestige and her friends saved her from internment in a concentration camp. She gave much of her time in these years to provide a sympathetic audience for her fellow Germans who were the victims of man's inhumanity.

In 1940 Dr. Kollwitz died and the life energies of Käethe Kollwitz were noticeably diminished from this event on to the end. The pace of the tragedy quickens, her oldest grandson, Peter, was killed on the Russian Front in 1942. After this she virtually stopped working. In 1943 the bombing of Berlin became intolerable and she moved to the house of Margaret Boenning, a sculptress, near Nordhausen. No. 25 Weissenburger Strasse was consumed in the holocaust of the siege of Berlin and many valuable works of art were lost. In 1944 it was imperative that she move once again, this time to Moritzburg near Dresden. She was under the protection of Ernest Heinrich, Prince of Saxony. On April 22, 1945, a few days before the Armistice, the weary, gentle, people's artist reached her final rest.

The beautiful drawings of Käethe Kollwitz represent to us the dignity of the relationship of parents to their children, the compassion we feel for parents and children when ugly events engulp their welfare, the nobility of the physician in his help and understanding to those who have need to be dependent upon him and finally the revelation, in a graphic form, of the deepest feelings of human beings to the great events of life.

How long will it take her to recover from her hip fracture if she just doesn't care?

**Does she really care?
s she alert, encouraged,
ositive and optimistic
bout getting completely
ell soon?
Or has she given in to
e demoralizing impact
confinement, disability
d dependency?
When functional fatigue
mplicates convalescence,
lertonic can help…**

Pleasant-tasting Alertonic is pipradrol hydrochloride —an effective cerebral stimulant whose gentle analeptic action helps counteract the apathy and inertia that can often delay convalescence—together with an excellent vitamin and mineral formula, in a satisfying 15% alcohol vehicle.

Nothing fosters confidence and a sense of well-being better than your own personal warmth, understanding and encouragement together with Alertonic to help insure prompt response.

Adequate dosage is important: Prescribe Alertonic— one tablespoonful t.i.d., 30 minutes before meals...tastes best chilled.

And for your patient's sake, prescribe Alertonic in the convenient, economical one-pint bottle.

Alertonic®

Available Only On Prescription

Each 45 cc. (3 tablespoonfuls) contains: alcohol, 15%; pipradrol hydrochloride, 2 mg.; thiamine hydrochloride (vitamin B_1) (10 MDR*), 10 mg.; riboflavin (vitamin B_2) (4 MDR), 5 mg.; pyridoxine hydrochloride (vitamin B_6), 1 mg.; niacinamide (5 MDR), 50 mg.; choline,† 100 mg.; inositol,† 100 mg.; calcium glycerophosphate, 100 mg. (supplies 2% MDR for calcium and for phosphorus) and 1 mg. each of the following: cobalt (as chloride), manganese (as sulfate), magnesium (as acetate), zinc (as acetate), and molybdenum (as ammonium molybdate).

*Multiple of adult Minimum Daily Requirement supplied.
†The need for these substances in human nutrition has not been established.

Indications: 1. Functional fatigue such as that often associated with: a depressing life experience or stressful time of life; advancing years; convalescence; limited activity or confinement. 2. Poor appetite and vitamin-mineral deficiency as they occur in: patients having faulty eating habits; geriatric patients who are losing interest in food; patients convalescing from debilitating illness or surgery.

Dosage: Adults, 1 tablespoonful; children (over 15 years old), 1 to 2 teaspoonfuls; children (4 to 15 years old), 1 teaspoonful. To be taken three times daily 30 minutes before meals.

Contraindications: As with other drugs with CNS stimulating action, Alertonic is contraindicated in hyperactive, agitated or severely anxious patients and in chorea or obsessive compulsive states.

Side effects: Reports of overstimulation have been rare. Patients who are known to be unduly sensitive to the effects of stimulant drugs should be observed carefully in the initial stages of treatment.

Merrell

THE WM. S. MERRELL COMPANY
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215

ANCILLARY

Computer Info Hookup Proposed for 3 Colleges

The day is not far off when a professor pondering a problem in his office will be able to get an immediate answer by merely typing out the question on a typewriter with a direct line to a computer system linking the resources of Wayne State University, The University of Michigan, and Michigan State University.

This is the forecast of Robert E. Hubbard, director of the Office for Institutional Research and the Administrative Data-Systems at WSU.

Dr. Hubbard's forecast is no mere dream, but one based on the facts and goal of a new organization currently being formed by WSU, U of M and MSU.

Wayne State's participation in the Michigan Educational Research Information Triad, Inc. (MERIT) was approved this month by the WSU Board of Governors and similar approval is expected by the governing boards at U of M and MSU.

A major purpose of the non-profit corporation is to study the problems of connecting the computing machines of the three participating universities.

"No vehicle exists for the universities to make a collective proposal to appropriate federal or private agencies for funds to hook the computers together and explore ways of transmitting information from one computer center to another," said Dr. Hubbard. "The purpose of MERIT is to make this possible."

Ultimately, a system of this kind would make the library resources of any one university available through tele-communication to students and faculty at all three universities.

The system would not only build a tri-university storehouse of information, but avoid duplication of efforts in many areas.

"The proposed plan represents another significant step forward in making the rich resources of one major university available to sister universities in the state," professor Hubbard said.

WSU GRAD ENROLLMENTS IN SOCIAL WORK JUMP

A total of 116 students are beginning a two year full-time graduate program for education for social work at the School of Social Work at Wayne State University.

In addition to the 116 students in the first year graduate class, there are another 116 students in the second year class completing the requirements for the degree of Master of Social Work at Wayne State.

State Library Index Lists Articles About MSMS Medi-label Project

"Medical Data Stickers" is the classification heading given to several articles about the MSMS Medi-label project in the Michigan State Library publication "Michigan Magazine Index." The librarians regularly read *Michigan Medicine* and other state publications and decide what articles should be noted in the Index.

Vol. I, No. 2 of the Index recently listed quite a number of *Michigan Medicine* articles including the Medi-label article from the December 1965 issue, and also the Michigan Hospitals article of February 1966 which suggested "Ask Your Doctor for a Medi-label."

The distribution of the MSMS Medi-labels continues each day in many doctors' offices across the state. For additional labels, MSMS members can write to "Medi-labels," MSMS, 120 West Saginaw, East Lansing.

Malpractice Insurance Offered by MAP

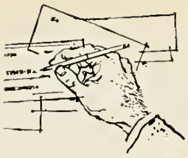
As a service to the members of the Michigan State Medical Society, the Michigan Association of the Professions is sponsoring a Professional Liability (malpractice) Insurance Plan. This type of plan will also be offered to other component organizations of MAP that are not sponsoring such a program.

Physicians are not required to be a MAP member to participate in this new business service.

The Shelby Mutual Insurance Company is the carrier for the new Professional Liability Insurance Plan. This is a mutual corporation organized under the laws of the State of Ohio and established in 1880. The policies are non-assessable and are backed by resources of 50 million dollars. The company maintains full time branch offices in Lansing and Detroit.

The administrator of the new MAP Professional Liability Plan is the Ben P. Stratton Agency, Inc. of Lansing. As you know, this agency is also the administrator for other insurance plans sponsored by MAP and the Michigan State Medical Society.

MSMS members may obtain further information by writing to MAP, 120 West Saginaw, East Lansing, Michigan.



Money Management

By W. Fred Mangan

Most people feel they intuitively know what to do with money, and how to use time.

A young doctor often suggests that he would wisely handle $50,000 if someone would only give it to him to start his practice. We have numerous examples of a young doctor handling such a sum in a short period of time and having little, and too often nothing, to show for it. It vanishes through his hands like a missile passes through the skies — here it comes and there it goes.

With a puzzled look he often asks, "Where does my money go?" The majority of people (and doctors are people too) attempt to live above their incomes. Easy acquisition of things by installment credit has become a way of life. The cliche "it's deductible" is another deadly gimmick that leads people into the trap of poor money managers.

During most of this century, our society has voted against individual frugality and for collective security. Our educational institutions, at any level, do little or nothing to acquaint young people with intelligent methods of handling money.

* * *

MOST DOCTORS learn about the use of time and money through trial and error. Time is money for professional people. Use of working time is how a doctor earns his money. Once he has it, his problems really begin. Time and money are inseparable in the life planning of a doctor.

We now want to turn your attention towards the creation of a positive attitude about money, and suggest a few facts and tools about how to use it.

Saving is choosing how to spend. The purpose for which families save falls roughly into three brackets:

1. Short Term Spending: This is something the family wants in the near future like a home, a car, a TV set, a freezer, a vacation.
2. Long Term Spending: The family is gradually building a fund to finance some large and distant expense, like college for children and retirement.
3. Security: The family has simply devoted part of its income to improving its financial strength.

Saving is a habit the same as spending results from habit. As with most habits, this habit of saving tends to intensify with age until it sometimes becomes the end instead of the means to achievement. One of the most common fears of the aging person is that his money will not last out his lifetime. Society presents many choices of what a man can do with his money, and most doctors can't ever make enough to have everything they may want of material things.

* * *

ONCE THE INDIVIDUAL gets into the habit of putting money aside, the habit of looking ahead and making deliberate choices of spending, he tends to retain this habit and finds saving is easy. On the other hand, the individual accustomed to satisfying the impulse of the moment, or letting tomorrow take care of itself, and of letting others assume responsibility, of ducking choices and decisions, find it very hard to save.

Contractual saving is an expert's name for such things as insurance policies and mortgages that compel the individual to save. All the evidence indicates that taking on this kind of commitment almost always produces savings. But, there is also evidence that over-obligating oneself in this way can bring on budget troubles and keep the individual from saving in other important ways.

Banking

A bank account can be more than just a safe and convenient storage bin for dollars not yet spent. It can be a useful money management tool and a valuable budget aid. Each family should have a banking system set up to fit its particular needs, resources and practices — and handle it with care once it has been set up. Experts are available to counsel a doctor and his family on the particular banking systems designed to fit their needs. Aside from a few exceptions, every doctor's wife should have a checking account. She should use it, and know how to reconcile her check book to the bank statement.

Some of the potential benefits of a good banking plan are:

1. Records that yield quick, accurate information on how much was spent on what, funds available for current projects, tax deductions, etc.
2. Machinery for sharing responsibility in handling family money keeping spending as a responsibility clear and distinct.
3. Centralized processing and control of scores

Mr. Mangan is Vice-President, Professional Management, Black & Skaggs Associates, Battle Creek.

of diverse daily, weekly, monthly and annual transactions that are the component parts of each family's financial operation.

Here are three bank account arrangements that a doctor's family may use. There are advantages and disadvantages, conditions and cautions attached to each. The professional checking account used at the office is excluded from this discussion.

ONE JOINT CHECKING ACCOUNT

Most doctor's families do their banking this way. They have just one checking account in the name of both husband and wife. Money controlled through a single joint account usually operates with the wife doing most of the check writing. The deposit to this account is made periodically, once a month is preferable, by writing a check on the office account. It is best to avoid depositing any form of income directly into the house checking account. The chief advantage of this single account system is that all transactions are recorded in one place. One set of check stubs summarizes almost everything, one set of cancelled checks witnesses all payments.

Moreover, concentrating the spending money in one account often keeps the monthly average minimum balance up and service charges down. Even though this account is joint it works best if one person does all the check writing.

Surplus funds should never be accumulated in a house checking account. This account is subject to habit spending by its very design, and when the balance is large it is easier to unwittingly boost living scales and eat up the surplus.

CHECKING ACCOUNT PLUS SAVINGS ACCOUNT

Most families have a savings account for spare cash and emergency fund. A savings account can also be used, like a checking account, as a spending and budgeting device.

The big infrequent or irregular budget items may be funneled through a savings account rather than through the checking account. By making regular monthly deposits from the checking account to the savings account, a revolving fund accumulates. This fund may then be used to meet insurance premiums, tax payments, purchase price of a new car or appliance, etc. It is easier to average out the big "now-and-then" items into small monthly nibbles. An unwitting drain on the checking account balance often occurs if something isn't done to provide for the now-and-then expenses.

TWO CHECKING ACCOUNTS

A checking account in the wife's name provides an opportunity to help her learn enough accounting and business procedure to be more capable of handling her affairs in the event of the husband's death. The time she spends to balance the check book, allocate the checks and to realize what things cost and how much money it takes to live is a distinct service to the family, and is usually appreciated by the husband.

A second checking account is often desirable when there is considerable investment activity, or if the husband is a member of a partnership. Normally, the tax man isn't interested in the details of a family checking account, unless it is used to acquire property or pay for items that are tax deductible.

It is simple to acquire property, insurance premiums, pay for tax deductible items and pay taxes from a single checking account.

Even though a family uses separate checking accounts, one for the doctor and one for the wife, they can still be joint accounts. The advantage: If either dies, the balance in the other's account is immediately available to the survivor. In case of emergency, either can write a check on each account. Most banks will permit two such accounts, or the accounts can be in different banks.

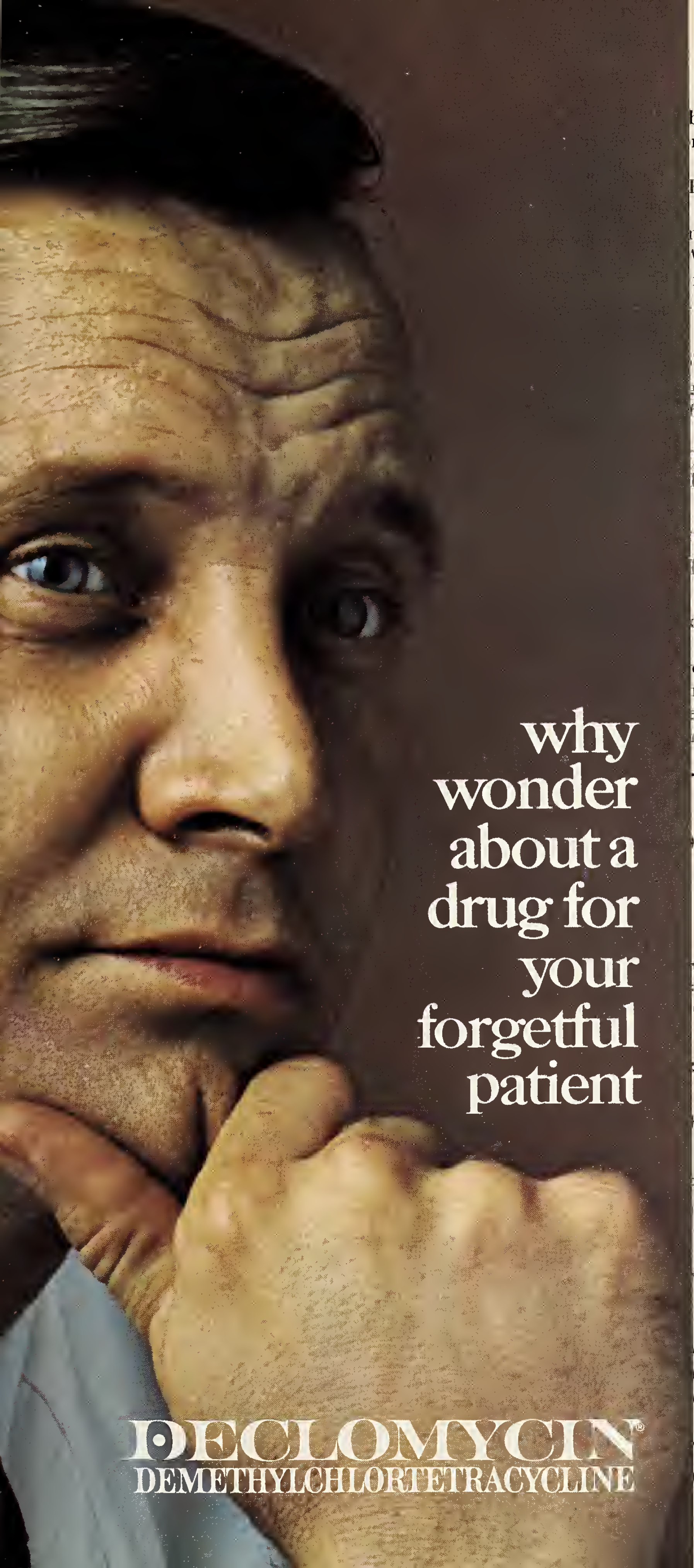
Building A Cash Reserve

Most doctors want an adequate cash reserve. The extent of this reserve will vary for each individual case. There are four reasons to accumulate a reserve.

1. Save for emergencies, such as temporary loss of earnings, the cost of illness in the family or any similar event that strikes without warning and requires immediate cash expenditures.
2. To save for disability, so that funds may be available in case the doctor becomes unable to work and earn either for a long period, or permanently.
3. To save for old age.
4. To save for death, so that a man's family will have something to fall back on if premature death keeps him from carrying out his other plans.

These are the main reasons why a doctor should save money, and each of them is a situation beyond his personal control. A man cannot, by his personal efforts, eliminate the possibility of their happening to him, or can he choose the date in which they will happen. What he can do is to recognize the risks involved and do everything in his power to plan for it. Then, if the blow falls, the fi-

(Continued on Page 1039)


why wonder about a drug for your forgetful patient
DECLOMYCIN®
DEMETHYLCHLORTETRACYCLINE

buy it. It is no longer available
me which $40,000 would norm-
is anything from a safe three
Five per cent is a fair assump-
investment factor often over-
ners in arriving at the annual
Vhen a doctor is thinking of
figure of one per cent of the
yardstick of monthly cost of

T OF $40,000 HOME

gage or interest income you	
6%	$2,400
	800
%	500
1%	100
	1,000
tal Annual Cost	$4,800
uivalent Monthly Rent	$400

come the costs of fuel, lights,
ce, etc. Another factor is a
lar locality will remain such
elative market value regardless
it on improvements. Expensive
ed market which can result in
ity capital when sold.

PLEASANT LODGE

elderly and chronically ill

Freedom of a large and richly
nd acres of lawns and wooded
ientifically prepared tasty meals,
nship. A real

away from Home"

higan and American Nursing
Highly recommended by mem-
al Profession who have had
e.

r information write to:

PLEASANT LODGE
West Gates Street
meo, Michigan
ateau 2-2591

of diverse daily, weekly, m
transactions that are the c
each family's financial ope

Here are three bank account
a doctor's family may use. Th
and disadvantages, conditions
tached to each. The professiona
used at the office is excluded fr

ONE JOINT CHECKING

Most doctor's families do t
way. They have just one check
name of both husband and wife.
through a single joint accoun
with the wife doing most of the
deposit to this account is made
a month is preferable, by writi
office account. It is best to av
form of income directly into t
account. The chief advantage
count system is that all transa
in one place. One set of check
almost everything, one set of
witnesses all payments.

Moreover, concentrating the
one account often keeps the
minimum balance up and ser
Even though this account is j
if one person does all the check

Surplus funds should never
a house checking account. This
to habit spending by its very
the balance is large it is eas
boost living scales and eat up t

CHECKING ACCOUNT PLUS SA

Most families have a saving
cash and emergency fund. A s
also be used, like a checking ac
and budgeting device.

The big infrequent or irre
may be funneled through a sa
than through the checking a
regular monthly deposits fro
count to the savings account, a
cumulates. This fund may the
insurance premiums, tax paym
of a new car or appliance,
average out the big "now-an
small monthly nibbles. An unw
checking account balance often
isn't done to provide for the
penses.

TWO CHECKING AC

A checking account in the w

activity doesn't stop when dosage does

DECLOMYCIN®
DEMETHYLCHLORTETRACYCLINE
300 mg FILM COATED TABLETS
are made for b.i.d.

Effective in a wide range of everyday infections—respiratory, urinary tract and others—in the young and aged—the acutely or chronically ill—when the offending organisms are tetracycline-sensitive.

Contraindication—History of hypersensitivity to demethylchlortetracycline.

Warning—In renal impairment, usual doses may lead to excessive systemic accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated and, if therapy is prolonged, serum level determinations may be advisable. A photodynamic reaction to natural or artificial sunlight has been observed. Small amounts of drug and short exposure may produce an exaggerated sunburn reaction which may range from erythema to severe skin manifestations.
In a smaller proportion, photoallergic reactions have been reported. Patients should avoid direct exposure to sunlight and discontinue drug at the first evidence of skin discomfort.

Precautions and Side Effects—Overgrowth of nonsusceptible organisms may occur. Constant observation is essential. If new infections appear, appropriate measures should be taken.
Use of demethylchlortetracycline during tooth development (last trimester of pregnancy, neonatal period and early childhood) may cause discoloration of the teeth (yellow-grey-brownish). This effect occurs mostly during long-term use but has also been observed in short treatment courses. In infants, increased intracranial pressure with bulging fontanels has been observed. All signs and symptoms have disappeared rapidly upon cessation of treatment. Side reactions include glossitis, stomatitis, proctitis, nausea, diarrhea, vaginitis and dermatitis. If adverse reaction or idiosyncrasy occurs, discontinue medication and institute appropriate therapy. Anaphylactoid reactions have been reported.

Average Adult Daily Dosage: 150 mg q.i.d. or 300 mg b.i.d. Should be given 1 hour before or 2 hours after meals, since absorption is impaired by the concomitant administration of high calcium content drugs, foods and some dairy products.

Capsules: 150 mg; *Tablets:* film coated, 300 mg, 150 mg, and 75 mg of demethylchlortetracycline HCl.

Lederle
LEDERLE LABORATORIES
A Division of American Cyanamid Company, Pearl River, New York
423-6-4072

ncial effect on him and his family will be inimized.

Most doctors want a plan to insure against two vels of hazards that are common to everyone — nergencies and premature death. An emergency nd should have high priority and should be ilored for each family. Each has its recommended vel for emergency reserve fund, ranging from ne month's earnings to enough to maintain the mily for six months on a reduced scale. Each octor should be brought to realize what his articular situation is and what his needs might .

This reserve should not be considered as a vaca- on fund or a new car fund to be depleted and built every year or two. It should remain in- ct for the real emergency that may strike with- ut warning. A portion of it should certainly be cash in a bank account, and the balance might in short term bonds or in some other form of vestment that is readily convertible to cash, e., savings bonds. The principal requisite of an nergency fund is that it should always be there nd should mean cash or its equivalent if it is serve its real purpose.

When To Recognize Surplus

Once a doctor has established his practice to ne point where it generates a predictable level income, acquired protection for his family in ne form of life insurance, protection against ac- dents and illness in the form of disability in- urance, accumulated adequate cash reserve, ac- uired his home and has an adequate part of it aid for, he has reached the point to think about hat to do with surplus funds in the future. At his time he has his first opportunity to consider nvestments.

Home Ownership

For many individuals the purchase of a home the major economic transaction undertaken dur- g their lifetime. Nearly everyone who first pur- ases a home must answer at least three important uestions. First, how large a house should be ob- ined in order to provide shelter for a growing mily and better living? Second, how large a urden of debt can safely be carried in the form f a mortgage? Third, is it likely that I can sell and get my money out when I am ready to buy ne house I really want?

The justifications for home ownership from a octor's viewpoint are sentiment and convenience. Iome ownership may actually cost an annual sum qual to rent. The man who buys a $40,000 house as that amount tied up in it, whether he pays cash or borrows to buy it. It is no longer available to produce the income which $40,000 would normally produce. This is anything from a safe three per cent upwards. Five per cent is a fair assumption. This is the investment factor often overlooked by homeowners in arriving at the annual cost of a house. When a doctor is thinking of buying a home, a figure of one per cent of the purchase price is a yardstick of monthly cost of living in it.

ANNUAL COST OF $40,000 HOME

Interest on mortgage or interest income you are foregoing @ 6%	$2,400
Taxes 2%	800
Maintenance 1¼%	500
Insurance ¼ of 1%	100
Depreciation	1,000
Total Annual Cost	$4,800
Equivalent Monthly Rent	$400

On top of these come the costs of fuel, lights, water, refuse service, etc. Another factor is a house in a particular locality will remain such and will retain its relative market value regardless of how much is spent on improvements. Expensive homes have a limited market which can result in a serious loss of equity capital when sold.

SAMMOND PLEASANT LODGE

Offers to the elderly and chronically ill

Peace and quiet. Freedom of a large and richly furnished home and acres of lawns and wooded rolling grounds, scientifically prepared tasty meals, congenial companionship. A real

"Home away from Home"

Member of Michigan and American Nursing Home Associations. Highly recommended by members of the Medical Profession who have had patients at the Lodge.

For further information write to:

SAMMOND PLEASANT LODGE
124 West Gates Street
Romeo, Michigan
Plateau 2-2591

Reports Impressions Of British Health Plan

(This article was written by Fay Smith, M.D., Professor of General Practice, University of Nebraska College of Medicine and appeared in the October issue of the Nebraska State Medical Society Journal)

The National Health Plan became a prominent subject of conversation as I visited with physicians in Scotland and England recently. In view of our Medicare Program about to be instituted, I felt I was looking into our own future.

In addition to the Edinburgh Clinics, I had the good fortune to visit and observe other private general practitioners while they were at work. One was in North East England, and the other about 30 miles south of London.

The general practitioner does a very basic type of office practice compared to the more extensive work of the general practitioners in this country. The only office laboratory procedure which I saw was the stick test for albumen. All blood counts and other laboratory work were sent to the hospital. No routine Pap smears of the cervix were done.

The general practitioner does no hospital work except in remote areas. Everything requiring any special attention is sent to the hospital where the resident staff of specialists takes over the entire care.

The salary of one general practitioner in an industrial area was about $4,000. Another who also had a number of factory appointments made $8,000 to $10,000.

In the school the beginning doctor made from 1,000 pounds (1 pound = $2.80) up to 2,750 pounds. A senior lecturer made 3,500 pounds and a professor made 4,400 pounds. The average general practitioner made 2,750 pounds per year.

Drugs are free to the patient; they take their prescriptions to the pharmacy and receive their medicines. The pharmacist then collects from the government. A short time ago there was a pharmacy charge of 28 cents to the patient for a prescription. This has since been removed, and no charge is made.

The government pays the doctor a little less than $3.50 per year per patient on his list, regardless of the number of calls to the office or to the home. A patient may change from one physician's list to another at will unless the list is "filled." A doctor is permitted about 3,000 on his list if practicing alone and about 4,000 if in a partnership.

I went on a call to the home of one patient wh seemed to be quite ill. This was on Thursday and she was told that an attempt would be mad to hospitalize her. If this were not possible th doctor would see her the following Monday.

Some health insurance is sold, which at time enables one to see the doctor more promptly. I does not help, however, in obtaining better hosp tal accommodations since all beds are full an very few new ones are being constructed.

Since a flat rate is paid per year to the docto for each patient on his list, he is not required t make any reports regarding the patient or the care He may keep such records as he chooses. He i only obligated to fill out requisitions for supplies

The incidence of malpractice threats and suit was very low with the doctors I met.

One very conscientious physician explained t me that since only a flat rate per patient was paid there was no incentive to work a little harder The doctor who "got by" with as little work a possible made as much as the one who "worked himself to death."

The day I left London, the Minister of Health made a public announcement that he recognized the problems of the English physicians and knew they were leaving England in large numbers. He urged them to be patient and said that he would try to do something to improve their lot. I wondered if this were a brief glimpse into the future of medicine in our country. One can only hope that if the people of our country do desire to change our system of medicine, they will at leas profit by some of the mistakes already made elsewhere, and not repeat them here.

Noted and Quoted:

The greatest advantage of a free society is its ability to inspire and organize voluntarily the tota capacities of its citizens. We need to protect the value of freedoms that are too much taken for granted, so that our example will convince people throughout the world of our continuing devotion to the ideal of free man fulfilling himself.

Erwin Canham
Editor, Christian Science Monitor

* * *

Voluntary cooperation is a social mechanism through which individuals and groups join forces to solve problems which are too big for individual action. This mechanism of voluntary cooperation and the American form of competition help makes our society unique.

George Romney
Governor of Michigan

hree members of the building committee which was esponsible for the construction of the Michigan Hos- ital Association headquarters in Lansing, take part dedication ceremonies held last Friday. Arkell B. ook, (right) chairman of the committee and execu- ve director of Butterworth Hospital in Grand Rapids, preads mortar on the building's cornerstone, which olds a "time capsule" of historical materials. Wait- g their turns are Walter R. Doud (left), adminis- ator of Saginaw St. Luke's Hospital, and C. Tiffany oftus, administrator of Benton Harbor Mercy Hos- ital.

ospital Association edicates Headquarters

Placement of a "time capsule" in the building's ornerstone featured the dedication of the Mich- gan Hospital Association's new headquarters in ansing.

Allan Barth, executive director of the associa- ion and the man under whose direction the state ospital group has experienced its major growth, as honored during the dedication ceremonies ith the presentation of a scroll recognizing his 0 years of exemplary leadership. Mr. Barth placed he historical documents and materials in the time apsule.

In his dedicatory address, Ronald D. Yaw, di- ector of Blodgett Memorial Hospital in Grand apids, cited the growth of the voluntary system Michigan and its contributions to the health nd welfare of the state's residents. In addition, eorge Cartmill, president of the American Hos- ital Association, extended the congratulations of he national group. Mr. Cartmill is president of arper Hospital in Detroit.

Dedication of the 12,000 square foot building marks the first time in the 47-year history of the association that it has had a permanent headquarters building.

Exterior finish of the building is of deep contrast, with the lower level in dark-toned brick topped by upper walls of white brick that are cut into vertical segments by strip windows. Architects for the building were Munson, Mattern and Barber with the construction by Foster, Schermerhorn and Barnes.

Court Rules Against Chiropractors

The U.S. Supreme Court in a landmark opinion has upheld a ruling of the U.S. District Court, New Orleans, that the State of Louisiana can properly refuse to license chiropractors unless they meet the same educational standards required of medical practitioners.

The ruling in *England v. Louisiana State Board of Medical Examiners* had been handed down by a three-judge panel in the New Orleans Federal Court last November *(The AMA News,* November 29, 1965, March 7, 1966), and appealed by the chiropractors to the U.S. Supreme Court.

In its ruling on June 20 the U.S. Supreme Court held, in effect, that the Equal Protection Clause of the Fourteenth Amendment of the U.S. Constitution does not bar Louisiana from requiring chiropractors to have medical school degrees.

In its unanimous November decision, the three-judge Federal District Court has rejected the chiropractors' argument that their constitutional rights were being violated. The three judges found that "there has been no showing here that the state has done more here than is necessary to protect the health of its citizens." The District Court opinion also said, "If the education obtained in chiropractic schools does not meet the standards of . . . the United States Office of Education, it may well be that the Legislature of Louisiana felt that in the public interest a diploma from an approved medical school should be required of a chiropractor before he is allowed to treat all the human ailments chiropractors contend can be cured by manipulation of the spine."

FOR YOUR STUDY

The monthly message by the MSMS President — see Page 917 urges members to study the new AMA pocketbook, "The Graduate Education of Physicians." Interested MSMS members may obtain one by writing to MSMS, 120 West Saginaw, East Lansing.

Outlines Great Changes In Medical Practice

Medical educators and students today face the challenge of teaching and learning medicine at a time when its practice is undergoing great change, Lester J. Evans, M.D., told Michigan State University's first medical students and faculty at the opening convocation this fall.

Dr. Evans, who served for 31 years as executive associate for medical affairs of the Commonwealth Fund, said ". . . In my opinion, medicine now has its greatest opportunity for service through helping the living person to achieve maximum effectiveness both for himself and society."

"I believe there is need for new schools, if for no other reason than to get a fresh start," he said.

Dr. Evans pointed out that most members of MSU's first medical class will have received their MD degrees and completed their average graduate study periods in 1974. At that time, he said, they will be entering a society in which:

—Multi-professional and group practice will be increasing.

—Economics of health services will be conti uing to move in the directions already establishe

—"The prevalence of some diseases will co tinue on the downgrade; others little noticed no will move up; the hazards of over-eating, smoki and emotional stresses and strains will continue

—Hopefully, cities will have become bett places to live in; health conditions of the po will have improved; and conditions causing u rest among minority groups will have been re tified.

—"However, it is doubtful that in this sho period it will have been possible to show ar major improvement in the health position of th nation, which now stands eleventh from the to when measured by certain indices, nor will th health conditions of our low ranking states hav been brought up to the levels of the higher ran ing states.

"One thing is certain," Dr. Evans added, "s ciety will continue to expect more and more fro its health professionals and services to which it making an ever increasing investment."

Dr. Evans said that if he could meet with th students and teachers eight years from now, h would ask them these questions:

(Continued on Page 1043)

★

Specialized Service

IN

PROFESSIONAL LIABILITY INSURANCE

is a high mark of distinction

THE

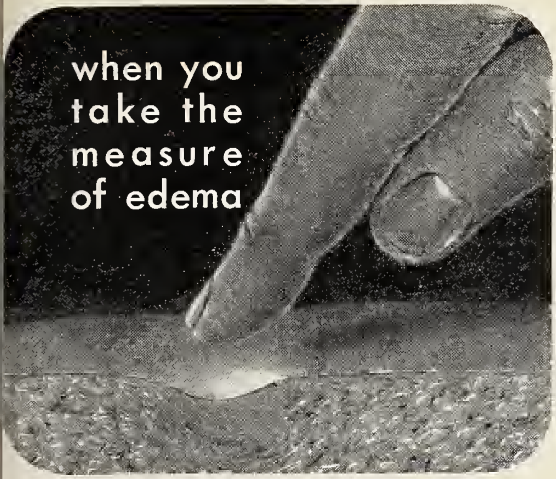
MEDICAL PROTECTIVE COMPANY

FORT WAYNE, INDIANA

Professional Protection Exclusively since 1899

DETROIT OFFICE: G. A. Triplett, R. K. Wind and R. H. Harp, Representatives
2405 West McNichols Road, Detroit 48221 Telephone: 313-862-8064

GRAND RAPIDS OFFICE: G. J. Haworth, Representative
422 Federal Square Building, Grand Rapids 49502 Telephone: 616-454-4477



. . . introduce your patient to

aquaTAG®

(BENZTHIAZIDE)

AQUATAG (Benzthiazide) is a potent, orally active, nonmercurial, diuretic agent. It is effective orally in producing diuresis in edema states, where it is therapeutically comparable to mercurials given parenterally. AQUATAG (Benzthiazide) is mildly antihypertensive in its own right and enhances the action of other antihypertensive drugs when used in combination.

DIURETIC ACTION: Clinically, the oral administration of AQUATAG (benzthiazide) results in diuretic activity within two hours with maximal natriuretic, chloruretic, and diuretic effects occurring during the fourth, fifth and sixth hours. Maintenance of response continues for approximately 12 to 18 hours. Acidosis is an unlikely complication since therapeutic doses of AQUATAG (benzthiazide) do not appreciably increase bicarbonate excretion. Edematous patients receiving 50 mg. of AQUATAG (benzthiazide) daily for five days developed a maximal increase in the rate of sodium excretion on the first day, and maintained this high rate until depletion of excessive body stores of sodium.

In congestive heart-failure patients, AQUATAG (benzthiazide) produced the same weight loss, during a 48-hour treatment period as did a maximally effective dose of hydrochlorothiazide.

DOSAGE: Diuresis, initially 50 to 200 mg.; maintenance 25 to 150 mg., daily. Hypertension 50 to 100 mg. initially, adjusted to 50 mg. t.i.d. or downward to minimal effective dosage level.

WARNINGS: Use with caution in the presence of renal disease as azotemia may be precipitated or increased. In patients with advanced hepatic disease, electrolyte imbalance may result in hepatic coma. Dosage of coadministered antihypertensive agents should be reduced by at least 50%. In cases of suspected electrolyte imbalance, serum electrolyte determinations,should be performed and imbalance, if any, corrected. Stenosis or ulcer of small intestine have been reported with coated potassium formulas, and surgery has been required and deaths have occurred. Based on surveys of both United States and foreign physicians, incidence of these lesions is low and a causal relationship in man has not been definitely established. Until further experience has been obtained, the use of the drug in pregnant patients should be weighed against possible hazards to the fetus.

CONTRAINDICATIONS: AQUATAG (benzthiazide) is contraindicated in progressive renal disease or dysfunction including increasing oliguria and azotemia. Continued administration of this drug is contraindicated in patients who show no response to its diuretic or antihypertensive properties. Severe hepatic disease is a relative contraindication. (See "Warnings" above.)

PRECAUTIONS AND SIDE EFFECTS: Electrolyte imbalance with hypokalemia (digitalis toxicity may be precipitated), hypochloremic alkalosis and hyponatremia may occur.

Patients with cirrhosis should be observed for impending hepatic coma and hypokalemia. Other reactions may include blood dyscrasias, hyperuricemia and gout, nausea, jaundice, anorexia, vomiting, diarrhea, dizziness, paresthesia, photosensitivity and headache. Hepatic fetor, tremor, confusion and drowsiness are signs of impending pre coma and coma in patients with cirrhosis. Insulin requirements may be altered in diabetes. AQUATAG (benzthiazide) should be used with caution post-operatively as hypokalemia is not uncommon. Potassium supplementation may be advisable pre- and post-operatively. There have been occasional reports of thrombocytopenia, leukopenia, agranulocytosis, aplastic anemia and precipitation of acute pancreatitis or jaundice.

Before prescribing or administering, read the package insert or file card available on request.

Available as 25 or 50 mg. scored tablets.

Request clinical samples and literature on your letterhead.

S.J.TUTAG
& COMPANY
Detroit, Michigan 48234

—Was full advantage taken of "the wide diversity and the many excellencies in the teaching and research in the basic physical and natural sciences departments, and the applied fields such as veterinary medicine, nutrition and health education?"

—"How did the course study of human biology pan out?. . . In what manner did it help you along the way sensing, unlike many medical students of your day, that the human being in all aspects of his living was, in fact, a most interesting subject, actually the key one, not the disease or the science, that you studied?"

—Scientific technology will not solve all patients' problems, but we should not ignore those which we cannot handle. "This being the case, I would want to know in 1974. . . how much you were aware of the interrelationship of the public and private sectors of society and the support of health service. . . and many other matters bearing on the organization and delivery of health and medical services to the individual and society as a whole."

IOWA HALL OF HEALTH

Between 50,000 and 75,000 persons are estimated to have visited the "Hall of Health" at the 1966 Iowa State Fair from August 19 to 28. The 1966 expanded "Hall of Health" project was spearheaded by the Iowa Interprofessional Association in cooperation with the State Department of Health and the Iowa State Fair Board.

For Your Library

Copies of "A Century of Service in Medicine," published as a Centennial highlight by MSMS, are still available for cost, $2.00. The book, bound handsomely in blue, was written by Wm. J. Stapleton, Jr., M.D., of Detroit, the MSMS Historian. To obtain a copy, write to MSMS, 120 West Saginaw, East Lansing, and enclose a check.

Classified Advertising

$2.50 per insertion of fifty words or less, with an additional five cents per word in excess of fifty.

GENERAL PRACTITIONER urgently needed to join 2-man group. New office and new modern hospital. 2 hours from Detroit and a University Hospital. Financial arrangements completely open to discussion. Please phone collect, Malcolm K. Dolbee, M.D. Area code 517, VI 6-2801.

GENERAL SURGEON—Looking for association with existing group. Received training from large medical center. Prefers lower Michigan. Reply Box 32, 120 W. Saginaw Street, East Lansing, Michigan.

WANTED: Locum Tenens for General Practice for July and or August 1967. Guarantee of $2,000 per month, plus commission. Will furnish residence. Must have Michigan License and references. Reply: F. W. Balice, M.D., 128 E. Butler Street, Adrian, Michigan.

FOR RENT: Doctors eleven-room clinic in Mason, 12 miles from Lansing. Has been occupied by doctors for over 25 years. Wonderful opportunity for professional man to establish a future. Shortage of medical services in this charming and thriving community with many churches and good schools. Contact: Delmar Kramer, Dart National Bank, Mason, Michigan, ORchard 7-3661, evenings ORchard 6-5586.

PSYCHIATRIC RESIDENCIES — Positions available January and July 1967. Fully approved; balanced didactic and clinical program. Three programs from which to choose; Three-Year Program, $8,352 to $9,500; Five-Year Career Program, $9,500 to $17,184; N.I.M.H. General Practitioner stipends, $12,000. Located in Michigan's Water Winter Wonderland. Contact Dr. Paul Kauffman, Director of Training, Traverse City State Hospital, Traverse City, Michigan. An equal opportunity employer.

COMMUNITY IN FLINT area needs an active young general physician to join group practice in new offices, and 50 bed hospital. Opportunity now. Arrangements open. Contact L. A. Phelps, M.D., 10122 Janaroy Court, Goodrich, Michigan 48438.

DOCTORS NEEDED IN TROY: Detroit's fastest growing suburb—Present population is over 27,000 and there are no MD's (according to telephone yellow pages). Space available next June or July in new Doctor's Building near the new Yamasaki Office at 16 mile Road and I-75. This mile of Big Beaver from Crooks to Livernois could become famous. It could become known as the most outstanding development of its type not only in Michigan but in the whole nation. Brochure available. Angus McLay, Broker: 177 W. Big Beaver, Troy, Michigan 48084. Phone: 313—689-0555.

FOR SALE: Physicians office building and basic equipment, examining tables, desks, etc. Suitable for one or two physicians. Write: Richard G. Barstow, M.D., 429 N. Center Street, Gaylord, Michigan.

EASTERN WISCONSIN CLINIC in rapidly growing community of 40,000 desires board-eligible or certified physicians in pediatrics, obstetrics and gynecology and internal medicine. Well-equipped clinic and excellent hospital facilities. Lake shore location offers ample recreational facilities. Attractive financial plan leading to early full partnership. Full expenses paid for applicants invited to interview. Call or write: F. L. Hildebrand, M.D. Riverside Clinic, Menasha, Wisconsin.

FOR LEASE by non-profit organization Medical Clinic room for two or three doctors and 1 dentist. Very rapidly growing area. Reply Waldo C. Proctor, Secretary, or Elmer Conrad, President, Dr. O. R. MacKenzie Clinic P.O. Box 164, Walled Lake, Michigan 48088.

MEDICAL TECHNOLOGISTS: ASCI certified or eligible, modern clinica laboratory. Excellent salary and benefits in a 360 bed general hospital with large expansion and building program for 1966-67. Apply: Edward W. Sparrow Hospital, Personnel Office, Lansing, Michigan.

RESIDENTS IN PATHOLOGY: Edward W. Sparrow Hospital, Lansing, Michigan: a 360 bed, general, Community, non-profit hospital expanding to 440 beds in 1967. The only hospital affiliated with new developing Michigan State University School of Medicine. Approved four year residency in clinical and surgical pathology. 195 autopsies, 7500 surgicals, and 200,000 clinical procedures per year. Well equipped laboratory, staffed with two full time Board Certified PA-CP Pathologists and a Technical Director, Ph.D. in Bio-Chemistry. Starting salary of $6,000 with yearly increases. Apply: Edward W. Sparrow Hospital, Personnel Office, Lansing, Michigan.

FOR SALE: X-ray 60MA Mattern, tilt table, fluoroscope, tanks, chest plate holder. Excellent well kept machine. $400.00, will deliver within 100 miles. Contact: James F. Gerrits, M.D., 1322 N. River Road, St. Clair, Michigan 48079.

FOR LEASE—New section of medical building. Ample parking. Suburban Grand Rapids—excellent location. Phone Grand Rapids GLendale 3-3111.

PROFESSIONAL MANAGEMENT
since 1932
PM®
FOR PHYSICIANS AND DENTISTS

Professional Management

BLACK AND SKAGGS ASSOCIATES
Affiliated Offices

Battle Creek - - - Detroit
Grand Rapids - - - Saginaw
Traverse City - - - Berkley

"SERVING THE MICHIGAN PHYSICIAN FOR OVER 30 YEARS"

THESE ADVERTISERS HELP MAKE MICHIGAN MEDICINE POSSIBLE

bott	921, 922, 923, 924
ies Co., Inc.	Cover III
ghton Hospital	986
roughs Wellcome & Co.	933
ssified Advertising	1044
ca-Cola	1003
rsey Laboratories	936, 1008, 1009, 1010, 1011, 1012, 1013, 1014, 1015, 1016, 1025, 1026, 1027, 1028, 1029
igy Pharmaceuticals	916, 997
nson, Westcott, & Dunnings, Inc.	913
ram Co., G.A.	947, 1006
ndall	941
gswood Hospital	944
eside Laboratories	981
derle Laboratories	931, 983, 990, 991, 1007, 1037, 1038
y, Eli and Co.	948
na Linda Foods	985
dical Protective	1042
dical Arts Supply	932
Merck Sharp & Dohme	926, 927
Mercywood Hospital	1024
Merrell	1032, 1033
Parke, Davis & Co.	Cover II
Philips Roxane Laboratories	1022, 1023
Pitman-Moore Division, Dow Chemical Co.	987, 1018, 1019
Plainwell Sanitarium	1045
Professional Management	1045
Robbins Co., Inc., A.H.	945, 946, 999, 1000, 1001
Roche Laboratories	Cover IV
Saint Mary's Hospital	920
Sammond Pleasant Lodge	1039
Searle	934, 935
Smith Kline & French Laboratories	943
Squibb	939, 970, 1021
Stratton, Ben P.	929
Syntex Laboratories	918, 919, 968, 969
Tutag, S. J. & Co.	1043
Warner Chilcott Laboratories	994, 995, 1004, 1005
Winthrop Laboratories	914
Wyeth	988, 989

PLAINWELL SANITARIUM, INC.

Plainwell, Michigan — MU 5-8441

Edwin M. Williamson, M.D.
M. Leroy Barry, M.D.

Dan W. Everett, M.D.
Wilbur R. King, Ph.D.

The Plainwell Sanitarium is a private psychiatric hospital licensed by the Michigan Department of Mental Health, and member of the American Hospital Association, Michigan Hospital Association, and National Association of Private Psychiatric Hospitals. Our extensive diagnostic treatment services include the following:

- Organic and psychological therapy for the psychiatrically and emotionally disturbed of all ages.
- Diagnostic evaluation of neurological disorders.
- Rehabilitative services for geriatric and convalescent patients.
- Medico-Legal counsel.
- Diagnostic and psychological evaluation and hospitalization, if indicated, of juveniles for Probate and Juvenile Courts.

Left to right — Ralph Blocksma, M.D., the Rev. Dr. Paul McCleave, Shirley Clark.

Ralph Blocksma, M.D., Grand Rapids, recently appeared on WZZM-TV's Shirley Show, during her weekly health program presented with the Michigan Health Council. "The Dignity of Dying" was the topic discussed by Doctor Blocksma, Chairman of the Kent County Medical Society's Committee on Medicine and Religion, and the Reverend Doctor Paul McCleave, Chicago, Director of the AMA's Department of Medicine and Religion.

* * *

Rudy Jarvi, M.D., Saginaw, is a member of the seven man championship team of the Saginaw Gun Club League.

* * *

Jack G. Lukens, M.D., Grand Rapids, addressed the Kent County Medical Assistants Society recently. "Spooks in the Inner Channel" was the title of Doctor Lukens' speech.

* * *

H. C. Tien, M.D., Lansing, is area coordinator for the course on Marital Dynamics and Family Therapy sponsored by the Michigan Society of Psychiatry and Neurology. The course is offered for non-psychiatrist physicians from September through May at St. Lawrence Hospital.

* * *

Co-chairman for the annual Gravely Shoals Race, sponsored by the Saginaw Bay Yacht Club was Robert Hafford, M.D., Bay City. More than 12 large craft competed in the 60-mile race on Saginaw Bay.

* * *

Two students enrolled in the first Michigan State University School of Human Medicine class are sons of Michigan physicians. They are Donald Parker, son of Donald A. Parker, M.D., Adrian, and Arno Weiss, son of Arno Weiss, M.D., Saginaw.

Both first-year medical students plan to follow their fathers' careers and become physicians.

* * *

Recently honored in New York by the American Medical Writers' Association was Alfred H. Whittaker, M.D., Grosse Pointe. Doctor Whittaker is one of 17 members of the A.M.W.A. elected to Fellowship in recognition of outstanding achievement in one or more aspects of medical communication.

Personal Mention

Paul Gikas, M.D., and Donald F. Huelke, Ph.D., two University of Michigan scientists directly involved in an auto-safety research program now underway, are the recipients of the Medical Tribune Auto Safety Award for 1966-67.

Doctor Gikas and Doctor Huelke have spent the last five years analyzing shattered human flesh and crumpled steel in an effort to learn how automobiles kill people. During the presentation it was stated that the work of Doctor Gikas and Doctor Huelke represents the kind of research which forms a foundation for the establishment of the University of Michigan's $10 million Highway Safety Research Institute.

* * *

The new director of medical education at Harper Hospital in Detroit is Geoffrey L. Brinkma M.D. Doctor Brinkman, previous associated with Henry Ford H pital, was born and educated New Zealand, attended Ota Medical College there and receiv his post-graduate training in Gre Britain and the United States.

* * *

"Now is the time to order yo 1966 Christmas Seal Cards," sa Paul Chapman, M.D., Detro President of the Michigan TB ar Respiratory Disease Association.

"This year," Doctor Chapma adds, "MTRDA is offering a va iety of new Christmas cards Scenes on the cards show two c paintings and two full color phot graphs of beautiful Michigan wi ter scenes. A brochure describi the cards in detail is availab from the Michigan Tuberculo and Respiratory Disease Associ tion, 403 Seymour Avenue, La sing.

* * *

The Seminar for Practical Nu es on Diabetes at the MSU Kello Center recently heard an addre by Robert M. Stow, M.D., Lansin on "The Physician's Role with t Diabetic Patient."

* * *

Stuart M. Finch, M.D., Profess of Psychiatry and Chief of Chil ren's Psychiatric Service at the U versity of Michigan, recently spo at the 37th Annual Parent Educ tion Institute held at the Unive sity of Michigan. Doctor Finc address was titled "Coping wi the Responsibilities of Pare hood."

* * *

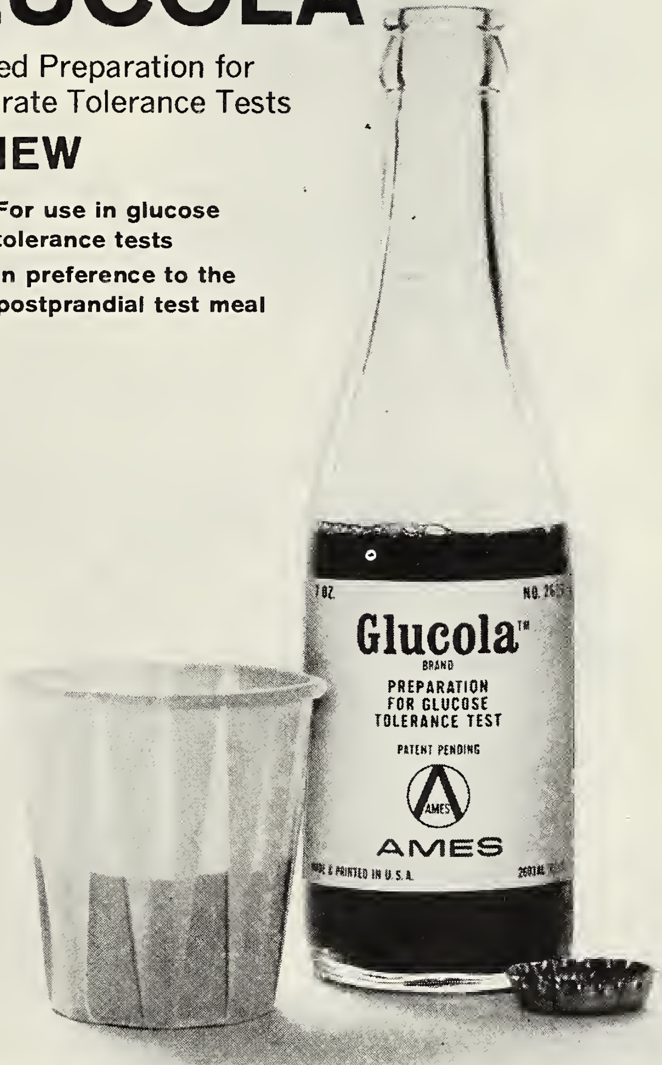
AMA President Charles L. Hu son, M.D., and Calhoun Coun Medical Society President Arno A. Albright, M.D., were among t speakers at the recent Centenni Celebration of the Battle Cre Sanitarium. The sanitarium w founded 100 years ago by the la John Harvey Kellogg, M.D.

GLUCOLA™

Carbonated Preparation for
Carbohydrate Tolerance Tests

NEW

- **For use in glucose tolerance tests**
- **In preference to the postprandial test meal**


7 OZ.
NO. 26
Glucola™
BRAND
PREPARATION FOR GLUCOSE TOLERANCE TEST
PATENT PENDING
AMES
AMES
MADE & PRINTED IN U.S.A.

A NEW SOLUTION FOR AN OLD PROBLEM

Ready to use • Pleasant tasting cola flavor • Well tolerated

A 7-ounce bottle of GLUCOLA provides a liquid oral loading dose equivalent to 75 Gm. of glucose* for carbohydrate tolerance testing. GLUCOLA avoids the nausea that frequently results from lingering sweet laboratory preparations, and the occasional emesis that necessitates rescheduling the test. With GLUCOLA, no time is lost weighing and mixing glucose "cocktails"—only a bottle opener is needed.

753(R2)64

*The rapidly hydrolyzable saccharides in this formulation assure optimum absorption and glucose levels comparable to those obtained with a 100 Gm. loading dose.

Available through your regular supplier:
cartons of 12 7-oz bottles (6 bottles per pack, 2 packs per carton).

Ames Company, Inc.
Elkhart, Indiana

AMES

when anxiety is part of the clinical picture

Librium®
(chlordiazepoxide HCl)

Before prescribing, please consult complete product information, a summary of which follows:

Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Warn against hazardous occupations requiring complete mental alertness. Use caution in administering to addiction-prone patients or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.

Precautions: In elderly and debilitated and in children over five, limit dosage to smallest effective amount, increasing gradually as needed and tolerated. In general, concomitant use with other psychotropics is not recommended. Paradoxical reactions have been reported in psychiatric patients and hyperactive aggressive children. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically. Observe usual precautions in presence of impaired renal or hepatic function, impending depression and suicidal tendencies.

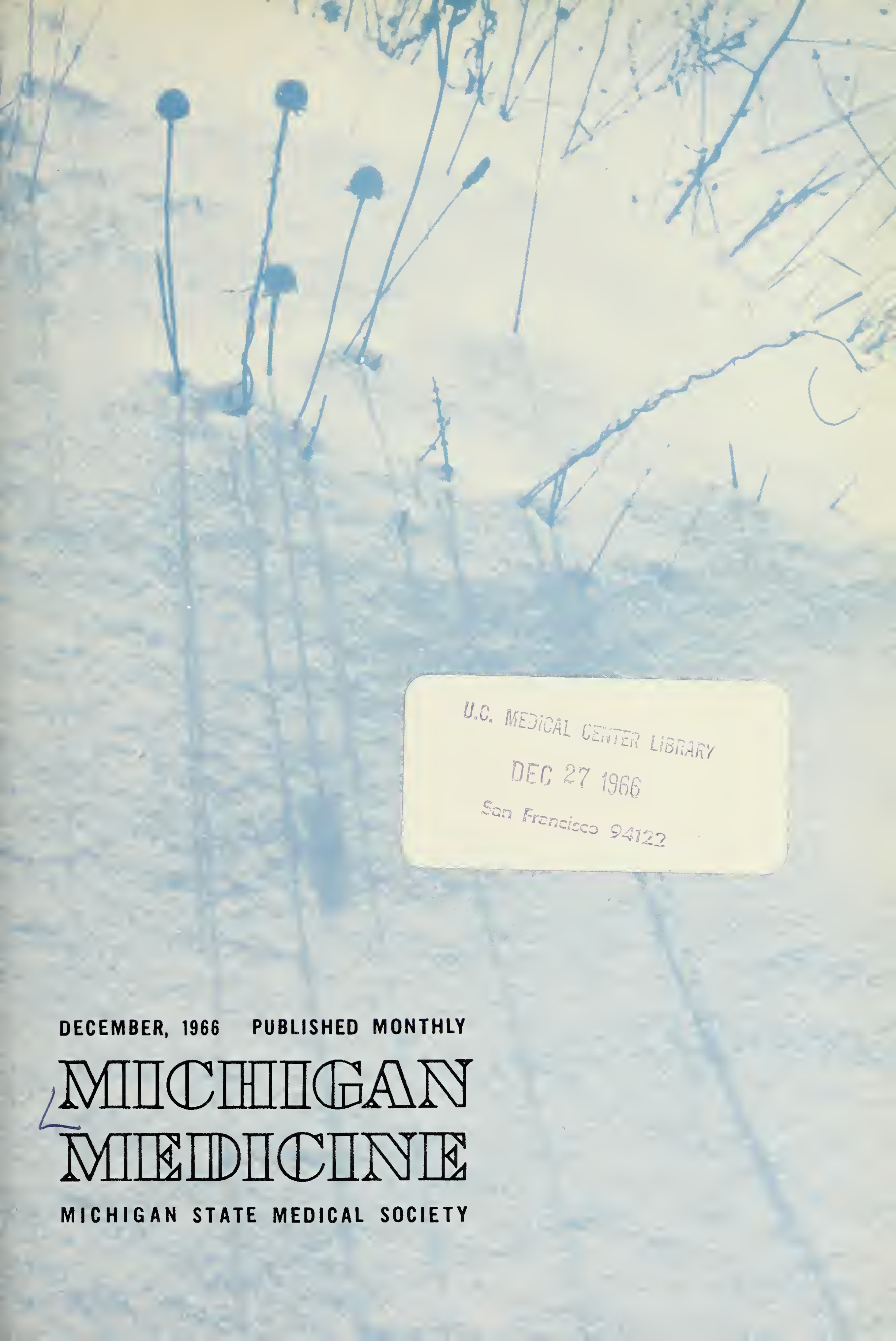
Adverse reactions: Drowsiness, ataxia and confusion may occur, especially in elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. Syncope occurs rarely. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis, jaundice and hepatic dysfunction) may develop occasionally, making periodic blood counts and liver-function tests advisable during protracted therapy. Individual maintenance dosages should be determined.

Dosage: *Oral*—Adults: Mild to moderate anxiety and tension, 5 or 10 mg t.i.d. or q.i.d.; severe states, 20 or 25 mg t.i.d. or q.i.d. Geriatric patients: 5 mg b.i.d. to q.i.d.

Supplied: Capsules, 5 mg, 10 mg and 25 mg—bottles of 50.

ROCHE

Roche Laboratories • Division of Hoffmann-La Roche Inc • Nutley, N.J. 07110



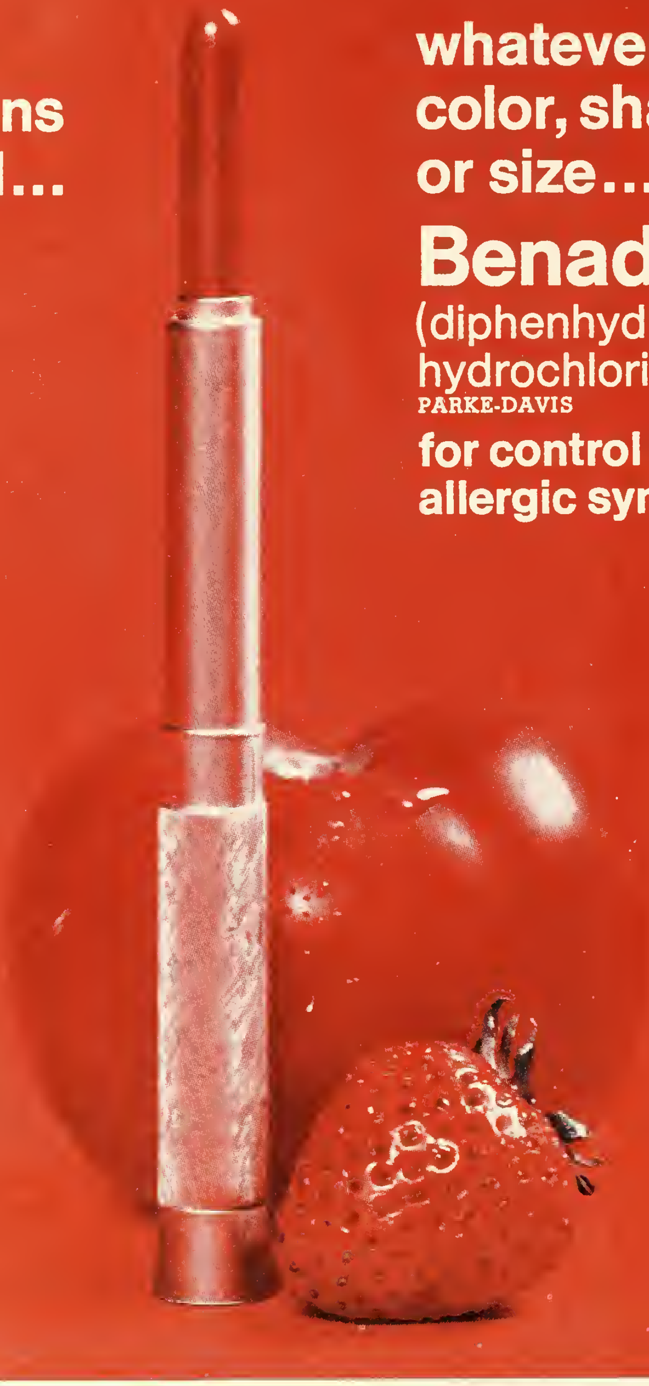
U.C. MEDICAL CENTER LIBRARY
DEC 27 1966
San Francisco 94122

DECEMBER, 1966 PUBLISHED MONTHLY

MICHIGAN MEDICINE

MICHIGAN STATE MEDICAL SOCIETY

some allergens are red...



whatever their color, shape, or size...

Benadryl®
(diphenhydramine hydrochloride)
PARKE-DAVIS

for control of allergic symptoms

Whether the allergen is red and round, or unseen and unknown, BENADRYL provides relief of symptomatic distress through its antihistaminic and antispasmodic actions. *PRECAUTIONS:* Persons who have become drowsy on this or other antihistamine-containing drugs, or whose tolerance is not known, should not drive vehicles or engage in other activities requiring keen response while using this product. Hypnotics, sedatives, or tranquilizers if used with BENADRYL should be prescribed with caution because of possible additive effect. Diphenhydramine has an atropine-like action which should be considered when prescribing BENADRYL. *SIDE EFFECTS:* Side reactions, commonly associated with antihistaminic therapy and generally mild, may affect the nervous, gastrointestinal, and cardiovascular systems. Most frequent reactions are drowsiness, dizziness, dryness of the mouth, nausea, and nervousness. BENADRYL is available in Kapseals® of 50 mg. and Capsules of 25 mg. 00666

PARKE-DAVIS

PARKE, DAVIS & COMPANY, Detroit, Michigan 48232

1866 1966 100th ANNIVERSARY

to help restore and stabilize the intestinal flora

LACTINEX®

TABLETS & GRANULES

for fever blisters and canker sores of herpetic origin

LACTINEX contains a standardized viable mixed culture of *Lactobacillus acidophilus* and *L. bulgaricus* with the naturally occurring metabolic products produced by these organisms.

LACTINEX was introduced to help restore the flora of the intestinal tract in infants and adults.[1,2,3,4]

LACTINEX has also been shown to be useful in the treatment of fever blisters and canker sores of herpetic origin.[5,6,7,8]

No untoward side effects have been reported to date.

Literature on indications and dosage available on request.

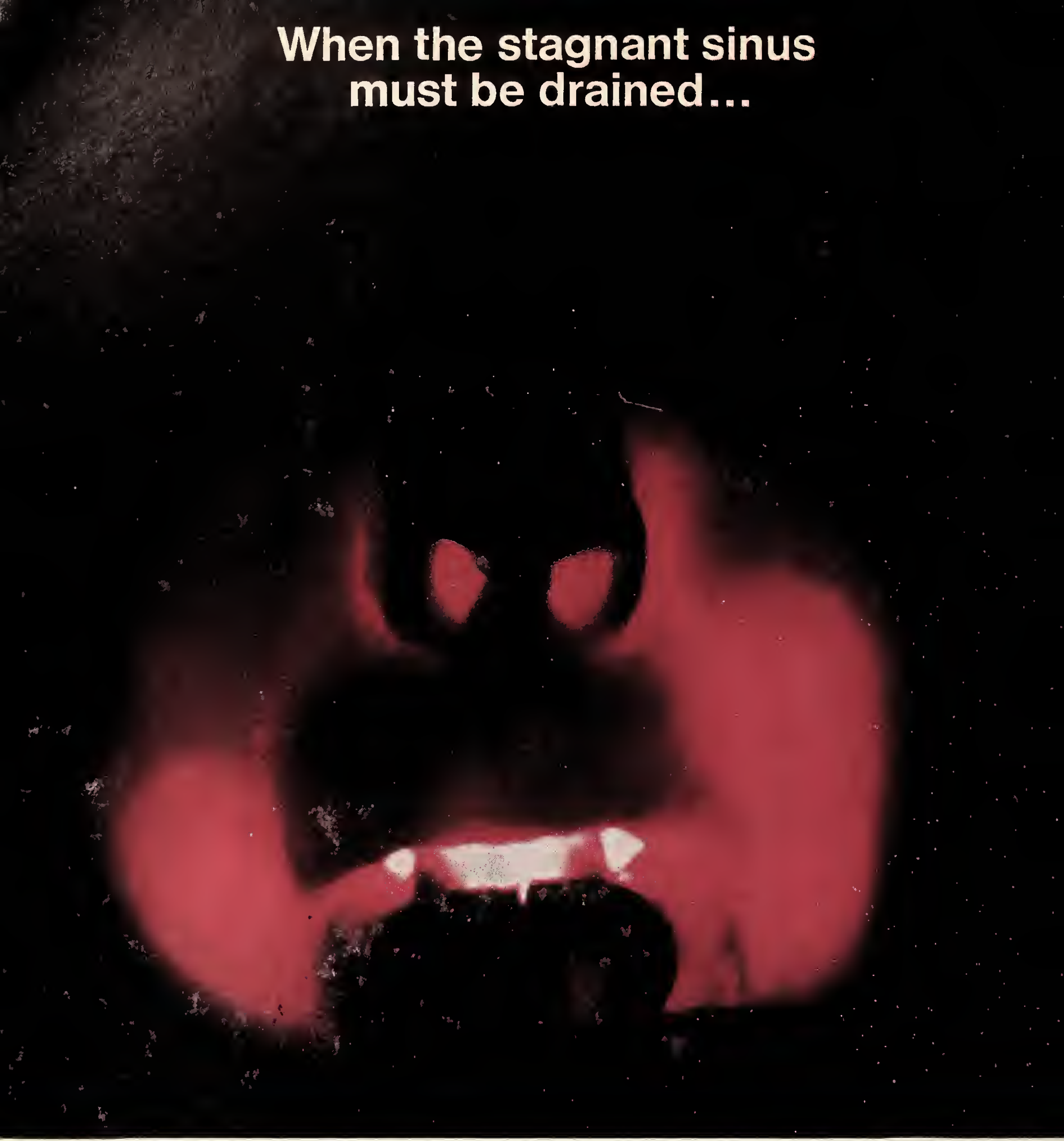
HYNSON, WESTCOTT & DUNNING, INC.

HW&D BALTIMORE, MARYLAND 21201

(LX03)

erences: (1) Siver, R. H.: CMD, *21*:109, September 4. (2) Frykman, H. H.: Minn. Med., *38*:19-27, uary 1955. (3) McGivney, J.: Tex. State Jour. Med., 16-18, January 1955. (4) Quehl, T. M.: Jour. of rida Acad. Gen. Prac., *15*:15-16, October 1965. (5) ekes, D. J.: N.Y. State Jour. Med., *58*:2672-2673, August 1958. (6) Weekes, D. J.: EENT Digest, *25*:47-59, December 1963. (7) Abbott, P. L.: Jour. Oral Surg., Anes., & Hosp. Dental Serv., 310-312, July 1961. (8) Rapoport, L. and Levine, W. I.: Oral Surg., Oral Med. & Oral Path., *20*:591-593, November 1965.

LX



Transillumination of the sinuses—diffuse shadow on right side of face indicates unilateral maxillary sinusitis.

In the common cold, Neo-Synephrine is unsurpassed for reducing nasal turgescence. It stops the stuffy feeling at once. It opens sinus ostia to re-establish drainage and lessen the chance of sinusitis. With Neo-Synephrine, in the concentrations most commonly used, decongestion lasts long enough for extended breathing comfort, without endangering delicate respiratory tissue. Systemic side effects are virtually unknown. There is little rebound tendency.

Winthrop Laboratories, New York, N.Y. 10016 Winthrop

Neo-Synephrine® HCl

Brand of phenylephrine hydrochloride

is available in a variety of forms, for all ages:

1/8% solution for infants
1/4% solution for children and adults
1/4% pediatric nasal spray for children
1/2% solution for adults
1/2% nasal spray for adults
1/2% jelly for children and adults
1% solution for adults (resistant cases)

Also NTZ® Solution or Spray
Antihistamine-decongestant

(1025M

DECEMBER, 1966
VOLUME 65, NUMBER 12
PUBLISHED MONTHLY BY MICHIGAN STATE MEDICAL SOCIETY

MICHIGAN MEDICINE

EAST LANSING
MICHIGAN

BLICATION COMMITTEE
OKER L. MASTERS, M.D., Fremont
Chairman
GENE R. ELZINGA, M.D., Marquette
RVEY S. HANSEN, M.D., Battle Creek
N MARSHALL, M.D., Kalamazoo
N W. McLEAN, M.D., Detroit
WARD H. RODDA, M.D., Bay City
LTON R. WEED, M.D., Grosse Pointe Park

entific Editor
ORGE H. LOWREY, M.D.

naging Editor
RBERT A. AUER

MS Executive Director and iness Manager
GH W. BRENNEMAN

he striking winter photograph the cover was taken by William Butler, M.D., Kalamazoo, who one of those to win special ors in the 1966 Doctor and Art Exhibit at the MSMS Annual Session.

SCIENTIFIC ARTICLES

1061 Medical Education and the Community/Andrew D. Hunt, Jr., M.D., Neil F. Bracht, M.A., M.P.H.

1067 Employment of Low Hyperbaric Therapy In Management of Leg Ulcers/Stanley Olejniczak, M.D.

1069 Hand-Schuller-Christian Disease and Pregnancy/William S. Floyd, M.D., F.A.C.O.G., S. Leonard Cohn, M.D., F.A.C.O.G.

1071 The Real Effect Imipramine, Isocarboxazid and Nialamide/C. E. Schorer, M.D., Paul Lowinger, M.D., Shirley Dobie, Ph. D.

1076 Acute Fatal Thrombocytopenia Occurring with Clinical Rubella/Charles H. Sander, M.D.

SPECIAL FEATURES

Ancillary 1106, 1109, 1114, 1118, 1122, 1124

Breaking News 1089, 1090, 1091, 1092, 1132

Dependent's Medical Care Contract 1089

From the Mailbag 1130

Index to Michigan Medicine, 1966, Vol. 65 1135

In Memoriam 1052

Mediscene 1100

Personal Mention 1140

President's Page 1051

State Society 1100, 1104

Viewpoints 1098

Published monthly, except two extra issues to be published in November and January, by the Michigan State Medi- Society as its official journal. Second class postage paid at Lansing, Michigan. Yearly subscription rate, $9.00; single es, 80 cents. Additional postage: Canada, $1.00 per year; Pan-American Union, $2.50 per year; Foreign, $2.50 per . Printed in USA. All communications relative to manuscripts, advertising, news, exchanges, etc., should be addressed Publication Committee, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48823.
1966 Michigan State Medical Society.
Phone: Area Code 517, 337-1351.

Are You Aware . . . .

That the Group Disability Insurance Plan sponsored by the Michigan State Medical Society can meet every test of quality that may be applied?

CHECK THESE IMPORTANT POINTS!

- **Renewal Guarantees.** The renewal of your protection is guaranteed even if the master policy should be terminated or if you should leave Michigan. This provision, of course, is contingent upon your remaining in active practice.
- **Long Term Protection.** Lifetime accident and illness to age 65. Shorter periods also available.
- **Favorable Definition of Total Disability.** Inability to perform the duties of your occupation for the first five years; thereafter, inability to engage in any occupation for which you are qualified by training or experience.
- **Low Cost.** Compare the cost of the MSMS Plan with any other of comparable quality. You will be pleasantly surprised. Premiums are low because of the applications of group rates and the combined purchasing of so many members of MSMS.

Examples of Annual Premiums:

Attained Age	Monthly Indemnity	Lifetime Accident 5 Years Sickness	Lifetime Accident Sickness to Age 65
Thru 33	$500	$126.90	$176.90
34-49	500	151.70	201.70
50-65	500	214.60	264.60

Write for premiums at other ages and other amounts of monthly indemnity.

BEN P. STRATTON AGENCY, INC.
ADMINISTRATOR

MICHIGAN STATE MEDICAL SOCIETY
INSURANCE PLANS
P. O. BOX 547
LANSING, MICHIGAN 48903

Above Plan Underwritten by Provident Life and Accident Insurance Company

Preliminary Analysis of Medicare

As the Michigan Medicine goes to press, Medi- re has been in effect for four months. Available eliminary information points up certain areas of ncern which must be mentioned and empha- ed.

The anticipated rush of Medicare patients did t materialize. Increase in medical care as the sult of Medicare patients has been minimal to odest both in the hospital and the physician's fice.

To me, this points up a fact which physicians ve stressed throughout the debates on this sub- t. The American system of medical care has en, and is, the best in the world; and has been eeting the health needs of the people even be- re Medicare. We might almost say, "I told you ."

* * *

ANALYSIS OF CLAIMS submitted under Med- re both in Michigan and elsewhere indicate that ysicians are accepting assignments in more than % of cases. Almost all medical organizations ve strongly urged their members to use the tra- tional method of direct billing for Medicare pa- nts. If this trend toward the assignment method ntinues, I foresee problems which will further mper the "usual and customary fee" concept. is trend will give impetus to the establishment a definite fee schedule and will tend to establish e 80% paid by the government as the total fee.

Much confusion still exists in the minds of the edicare beneficiaries as to the extent of their verage and the details of the mechanisms for the yment of these services.

* * *

IT CANNOT BE too highly recommended that ysicians or their aides give all reasonable and necessary assistance to Medicare patients in explaining the included services and in helping them complete the necessary forms.

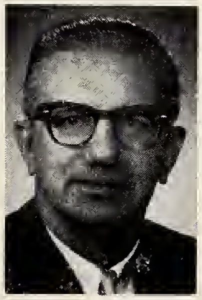
Payment for services under Medicare has been slow and spotty. It is reasonable to expect such a slow beginning when one considers the extremely complex mechanism that had to be established by the Social Security Administration and the fiscal carriers. Nevertheless, the officers and members of The Council of MSMS want to know of any difficulties that members might be having concerning Medicare payments so that they can be resolved before they become major state-wide problems.

* * *

FINALLY, I SINCERELY believe that the physicians of Michigan and of the nation as a whole must be commended for their part in getting Medicare off to a smooth beginning. We are fundamentally opposed to most aspects of this type of legislation, but we can be proud that we participated so actively in making sure that the medical needs of the patients were met just as expeditiously as in the days before Medicare.

MSMS President

C. Allen Payne, M.D.



Foresees Joint Efforts By Public, Private Colleges

"As the magnitude of the task of the urban universities is more fully identified, we will see even more clearly, the constructive roles that may be played by private universities and the public universities working together."

So declared William Rea Keast, Wayne State University president, at the installation of the Very Rev. Malcolm Carron, new president of the University of Detroit.

Father Carron, in his inaugural address, promised that the university "would live on that frontier where the world meets the church" and try to prepare its graduates for the demands of an urban society.

"Most of our graduates will live in the urban communities of this nation," Father Carron said. "If they are not equipped to help solve the problems of urban life, who will find the solution?"

In Memoriam

George J. Baer, MD, Detroit

George J. Baer, M.D., Detroit physician for 25 years, died October 27 in Bon Secours Hospital at age 54.

Born in Pennsylvania, Doctor Baer was graduated from Duke University Medical School in 1937. Doctor Baer was an associate of the International College of Surgeons and a member of Phi Chi medical fraternity. He was on the staff of Bon Secours, Cottage, Holy Cross, St. John's, Saratoga, St. Joseph Mercy, Delray General and Herman Kiefer Hospitals, all of Detroit.

Richard Chajes, MD, Farmington

Richard Chajes, MD, 53, Farmington physician, died October 14 in Brent Hospital where he was a staff member.

A graduate of the University of Vienna in 1945, Doctor Chajes practiced in Israel before coming to Detroit. Doctor Chajes was also on the staff at Plymouth General Hospital and a member of the Maimonides Medical Society.

Joseph H. Curhan, MD, Detroit

Joseph H. Curhan, M.D., Detroit obstetrician and gynecologist for 39 years, died October 19. He was 65.

A 1924 graduate of Tufts Medical School, Massachusetts, Doctor Curhan served his internship in Boston City Hospital and Hurley Hospital, Flint. Doctor Curhan was an OB-Gyn resident in Woman's Hospital in Detroit and Chicago Lying-In Hospital.

A Past President of the Michigan Society of Obstetrics and Gynecology, Doctor Curhan was a Fellow of the American College of Surgeons and the American College of Gynecologists. He served as a clinical instructor in obstetrics and gynecology at Wayne State University Medical School, and was chief of the OB-Gyn Department of Grace Hospital and attending physician in OB-Gyn at Sinai Hospital, both of Detroit. Doctor Curhan's medical fraternity was Phi Delta Epsilon.

Mary Margaret Frazer, MD, Detroit

Mary Margaret Frazer, MD, named Michigan Medical Woman of the Year in 1957, died Oct ber 31 in Jennings Hospital. She was 75.

A native of Petrolia, Ontario, she came to D troit after World War I. She obtained her medic degree from the Wayne State University School Medicine in 1932 and her master's degree in e docrinology at the University of Detroit. A pa president of the Detroit branch of the America Medical Women's Association, Doctor Frazer w also past president of the University of Detro Alumnae Association and in 1943 was given th group's first Woman of the Year award. Doct Frazer was a member of the American Acaden of General Practice and served for many years medical director of the Women's Cancer Dete tion Clinic in Detroit.

During World War II Doctor Frazer was acti in Wayne County civil defense work.

Doctor Frazer was a Life Member of the Mic igan State Medical Society.

Stephen M. Gelenger, MD, Flint

Stephen M. Gelenger, M.D., 65, Flint physicia and former director of Genesee Memorial Hosp tal, died October 19 at Hurley Hospital.

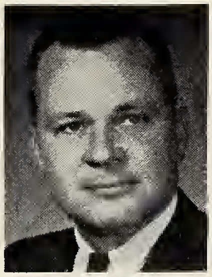
Born in Hungary, Doctor Gelenger was gra uated from the University of Michigan School Medicine and did postgraduate work at Herma Kiefer Hospital, Detroit. From 1953 to 1960 Doct Gelenger was superintendent of the Genesee Cou ty Tuberculosis Sanatorium and continued to he the facility as director when it was renamed Ge esee Memorial Hospital. A former chief of t chest diseases section at Hurley Hospital, Doct Gelenger also served on the teaching staff of i School of Nursing. Doctor Gelenger was Genes County Health officer for seven months in 19 and 1936, was a consultant on tuberculosis a chest diseases for the Flint Health Departme from 1935 to 1942 and from 1946 to 1949, and w the Flint Public Schools physician from 1931 1933. Doctor Gelenger was on the staffs of Joseph and McLaren General Hospitals.

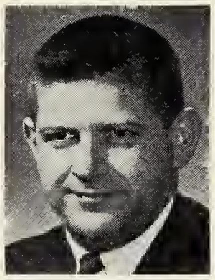
A Past President of the Michigan Chapt American College of Chest Physicians, Doctor G

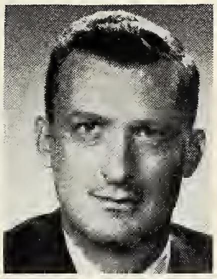
(Continued on Page 1058)

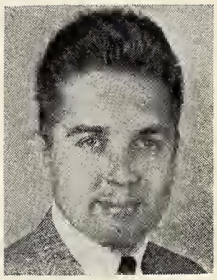
In Michigan . . .
These Syntex men serve the physician

Gerard DeBusschere
St. Clair Shores,
Michigan
777-4083


Thomas Doyle
Detroit, Michigan
533-9506


David Hershberger
Williamston, Michigan
655-2929


Jerry C. Johnson
Elkhart, Indiana
264-0362


David Jones
Toledo, Ohio
475-2501

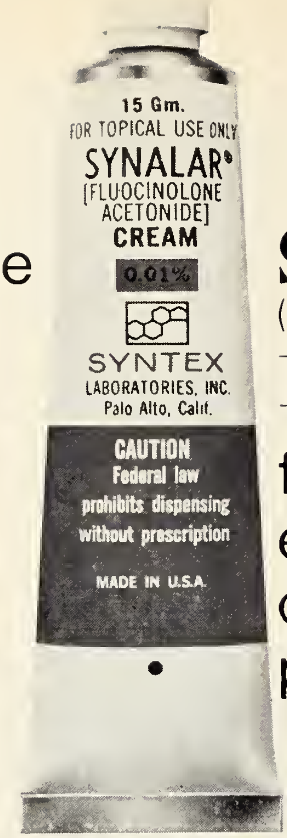
Joseph Monticciolo
Saginaw, Michigan
754-8939

Everett A. Murray
Royal Oak, Michigan
548-4881

Gareth Williams
Comstock Park,
Michigan
363-2479

Raymond Zagar
Milwaukee, Wisconsin
442-7461

SYNTEX
LABORATORIES INC. PALO ALTO, CALIF



new small size

Synalar® 0.01%
(fluocinolone acetonide) **cream**
15 Gm.

for even greater economy in office or hospital practice

**the superiority
topical
with the**

Now you can prescribe as little or as much Synalar Cream 0.01% as is needed for a particular therapeutic problem in a size that permits the greatest economy for your patient. The new 15 Gm. tube, for example, is best suited for short-term therapy and for small sites. For more extensive body areas prescribe the 45 Gm. tube—a size that's also ideal for your treatment table. And the 120 Gm. jar is most economical for hospital use. Thus, with Synalar Cream 0.01%, you have the superiority of a modern topical corticosteroid shown to be more effective than 1% hydrocortisone[1-3] plus the economy that makes therapy practical for use in more dermatologic conditions, in long-term maintenance, with occlusive dressings in resistant cases, and in extensive area involvement.

Contraindications: Tuberculous, fungal, and most viral lesions of the skin (including herpes simplex, vaccinia, and varicella). Not for ophthalmic use. Contraindicated in individuals with a history of hypersensitivity to any of its components. **Precautions:** 1. *General*—Synalar Cream 0.01% is virtually nonsensitizing and nonirritating. Where severe local infection or systemic infection exists, the use of systemic antibiotics should be considered, based on susceptibility testing. While topical steroids have not been reported to have an adverse effect on pregnancy, the safety of their use on pregnant females has not absolutely been established. Therefore, they should not be used extensively on pregnant patients, in large amounts, or for prolonged periods of time. 2. *Occlusive dressing method*—With occlusion of extensive areas, systemic absorption of the corticosteroid may occur, and suitable precautions should be taken. Occasional patients may show contact sensitivity to a particular dressing material or adhesive. Miliaria, folliculitis, or pyodermas have been seen infrequently with the use of this technique. The development of infection requires appropriate antibacterial therapy and discontinuation of the occlusive dressing method. Local atrophy and striae have been reported with protracted occlusive dressing therapy. While lesion relapses can be expected to occur in many psoriatic patients, remissions may persist for several weeks to several months in favorable cases. The patient whose psoriasis is in an active stage, with recent appearance of new lesions, may not be a good candidate and may show early relapse. Some plastic films may be flammable, and due care should be exercised in their use. Similarly, caution should be employed when such films are used on or left near children to avoid the possibility of accidental suffocation. **Side Effects:** Side effects are not ordinarily encountered with topically applied corticosteroids. As with all drugs, however, a few patients may react unfavorably to Synalar under certain conditions. **References:** 1. Cahn, M. M., and Levy, E. J.: J New Drugs 1:262 (Nov.-Dec.) 1961. 2. Meenan, F. O.: J Irish Med Ass 52:75 (Mar.) 1963. 3. Robinson, H. M., Jr., Raskin, J., and Dunseath, W. J. R.: Southern Med J 56:797 (Jul.) 1963.

f a modern
orticosteroid
conomy of
ydrocortisone

...a choice of 3
nomical sizes

SYNALAR
CREAM
SYNTEX

Gm. jar 15 Gm. tube 45 Gm. tube

fluocinolone acetonide — an original steroid from
SYNTEX
LABORATORIES INC., PALO ALTO, CALIF.

Norinyl® tablets

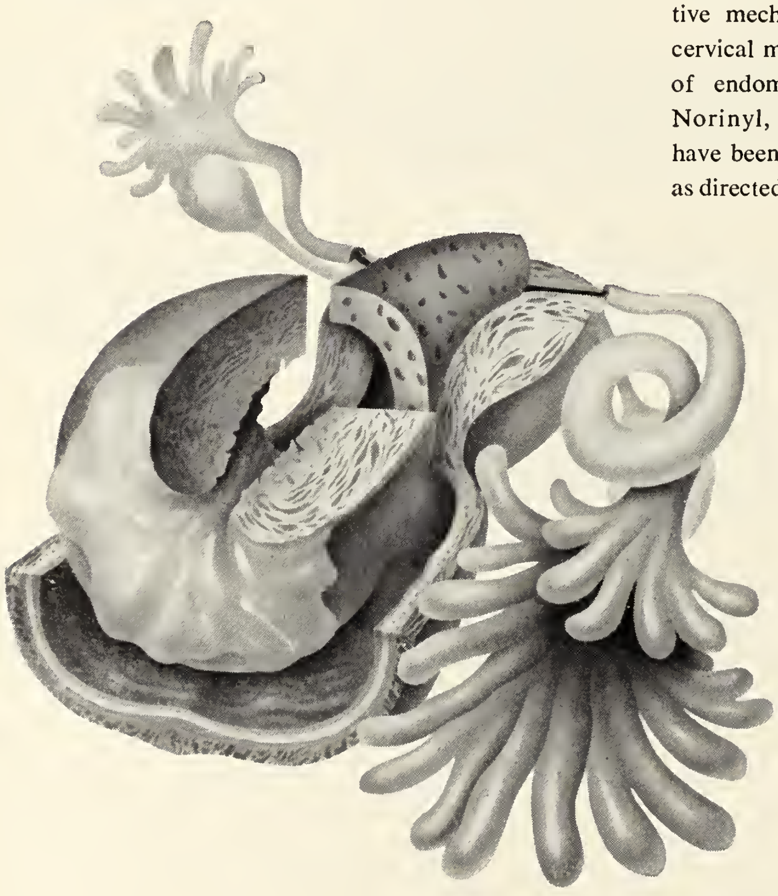
(norethindrone 2 mg. c̄ mestranol 0.1 mg.)

for multiple contraceptive action that has produced a record of unexcelled effectiveness

inhibition of ovulation by means of 2 time-proved hormonal agents

production of a cervical mucus hostile to sperm motility and vitality

creation of an endometrium unreceptive to egg implantation



no unplanned pregnancies

Norinyl provides multiple action for maximum assurance of success. It does not depend on ovulation inhibition alone for contraceptive effectiveness. The mechanism of action of combined hormonal therapy results in ovulation inhibition reinforced by other protective mechanisms, including a hostile cervical mucus[1-13] and an acceleration of endometrial changes.[1-3,7-16] With Norinyl, no unplanned pregnancies have been reported to date when used as directed.

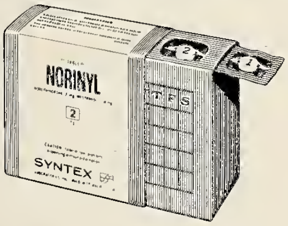
plus important supportive benefits that help her through those critical early months of oral contraception

low incidence of side effects

Low incidence of BTB and spotting, nausea and amenorrhea tends to minimize side effect problems and increases patient cooperation.

no confusion about dosage

An unbreakable "confusionproof" package makes it easy to adhere to prescribed dosage schedule: individually sealed tablets numbered from 1 through 20 *plus* monthly calendar record enables patient to double-check dosage intake by day and corresponding tablet number.



Contraindications: Thrombophlebitis or pulmonary embolism (current or past). Existing evidence does not support a causal relationship between use of Norinyl and development of thromboembolism. While a study which was conducted does not resolve definitively the possible etiologic relationship between progestational agents and intravascular clotting, it tends to confirm the findings of the Ad Hoc Advisory Committee appointed by the Food and Drug Administration to review this possibility. Cardiac, renal or hepatic dysfunction. Carcinoma of the breast or genital tract. Patients with a history of psychic depression should be carefully studied and the drug discontinued if depression recurs to marked degree. Patients with a history of cerebral vascular accident.

Warning: Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions, medication should be withdrawn.

Precautions: By May 1963, experience with norethindrone 2 mg.—mestranol 0.1 mg. had extended over 24 months. Through miscalculation, omission or error in taking the recommended dosage of Norinyl, pregnancy may result. If regular menses fail to appear and treatment schedule has not been adhered to, or if patient misses two menstrual periods, possibility of pregnancy should be resolved before resuming Norinyl. If pregnancy is established, Norinyl should be discontinued during period of gestation since virilization of the female fetus has been reported with oral use of progestational agents or estrogen. When lactation is desired, withhold Norinyl until nursing needs are established. Existing uterine fibroids may increase in size. In metabolic or endocrine disorders, careful clinical preevaluation is indicated. A few patients without evidence of hyperthyroidism had elevated serum protein-bound iodine levels, which in the light of present knowledge, does not necessarily imply hyperthyroidism. Protein-bound iodine increased following estrogen administration. Bromsulphalein retention has occurred in up to 25% of patients without evidence of hepatic dysfunction. Studies from 24-hour urine collections have shown an increase in aldosterone and 17-ketosteroids and decrease in 17-hydroxycorticoid levels. Thus, Norinyl should be discontinued prior to and during thyroid, liver or adrenal function tests. Because progestational agents may cause fluid retention, conditions such as epilepsy, migraine and asthma require careful observation. Thus far no deleterious effect on pituitary, ovarian or adrenal function has been noted; however, long-range possible effect on these and other organs must await more prolonged observation. Norinyl should be used with caution in patients with bone, renal or any disease involving calcium or phosphorus metabolism.

Side Effects: Intermenstrual bleeding; amenorrhea; symptoms resembling early pregnancy, such as nausea, breast engorgement or enlargement, chloasma and minor degree of fluid retention (if these should occur and patient has not strictly adhered to medication plan, she should be tested for pregnancy); weight gain; subjective complaints such as headache, dizziness, nervousness, irritability; in a few patients libido was increased. In a total of 3,090 patients, 2.2% discontinued medication because of nausea.

NOTE: See sections on contraindications and precautions for possible side effects on other organ systems.

Dosage and Administration: One Norinyl tablet orally for 20 days, commencing on day 5 through and including day 24 of the menstrual cycle. (Day 1 is the first day of menstrual bleeding.)

Availability: Dispensers of 20 and 60 tablets; bottles of 100.

References: 1. Council on Drugs. JAMA 187:664 (Feb. 29) 1964. 2. Bryans, F. E.: Canad Med Ass J 92:287 (Feb. 6) 1965. 3. Goldzieher, J. W.: Med Clin N Amer 48:529 (Mar.) 1964. 4. Cohen, M. R.: Paper presented at Symposium on Low-Dosage Oral Contraception, Palo Alto, Calif., July 15, 1965. Reported in Med Sci 16:26 (Nov.) 1965. 5. Hammond, D. O.: Ibid. 6. Rice-Wray, E., Goldzieher, J. W., and Aranda-Rosell, A.: Fertil Steril 14:402 (Jul.-Aug.) 1963. 7. Goldzieher, J. W., Moses, L. E., and Ellis, L. T.: JAMA 180:359 (May 5) 1962. 8. Kempers, R. D.: GP 29:88 (Jan.) 1964. 9. Tyler, E. T.: JAMA 187:562 (Feb. 22) 1964. 10. Rudel, H. W., Martinez-Manautou, J., and Maqueo-Topete, M.: Fertil Steril 16:158 (Mar.-Apr.) 1965. 11. Flowers, C. E., Jr.: N Carolina Med J 25:139 (Apr.) 1964. 12. Goldzieher, J. W.: Appl Ther 6:503 (June) 1964. 13. The Control of Fertility. Report adopted by the Committee on Human Reproduction of the American Medical Association. JAMA 194:462 (Oct. 25) 1965. 14. Flowers, C. E., Jr.: JAMA 188:1115 (June 29) 1964. 15. Merritt, R. I.: Appl Ther 6:427 (May) 1964. 16. Newland, D. O.: Paper presented at Symposium on Low-Dosage Oral Contraception, Palo Alto, Calif., July 15, 1965. Reported in Med Sci 16:26 (Nov.) 1965.

norethindrone—an original steroid from
SYNTEX
LABORATORIES INC., PALO ALTO, CALIF.

Norinyl® tablets
(norethindrone 2 mg. c̄ mestranol 0.1 mg.)

for multiple contraceptive action

enger was also a former director and President of the Genesee County Tuberculosis Association and served on the board of trustees for the state tuberculosis association. His medical memberships included the Michigan and National Trudeau Societies and the Association of Military Surgeons.

During World War II Doctor Gelenger was an Army physician, and in the Korean War was in charge of a U. S. Army hospital in Korea and was a staff surgeon for North Korean prisoners of war.

Doctor Gelenger was an Associate Member of the Michigan State Medical Society.

Edgar J. Hermes, MD, Lansing

Edgar J. Hermes, MD, Lansing anesthesiologist, died September 28. He was 69.

A life-long resident of Lansing, Doctor Hermes was graduated from St. Louis University Medical School in 1924. Doctor Hermes was a former secretary and treasurer of the Ingham County Medical Society and a member of Chi Zeta Chi Medical Fraternity. He was affiliated with St. Lawrence, Sparrow and Ingham Medical hospitals, all of Lansing.

During World War I Doctor Hermes served in the army from 1917 to 1918.

Niles H. Schwocho, MD, Allen Park

Niles H. Schwocho, MD, Allen Park general practitioner, died September 27 in Oakwood Hospital, Dearborn. He was 45 years old.

A 1952 graduate of the Wayne State University School of Medicine, Doctor Schwocho was a member of its Alumni Association board of governors. A city councilman, Doctor Schwocho came to Allen Park 15 years ago. He was a staff member of both Oakwood and Outer Drive hospitals.

Doctor Schwocho was a member of Phi Rho Sigma medical fraternity.

Wayne Southwick, MD, Springport

Wayne A. Southwick, MD, Springport physician, died October 5 at age 55.

Formerly a physician at Southern Michigan Prison at Jackson, Doctor Southwick practiced in Springport for six years prior to his death. He also served on the board of education and village council.

Doctor Southwick was a veteran of World War II.

James J. Woods, MD, Ypsilanti

James J. Woods, MD, Past President of th Washtenaw County Medical Society and long tim practitioner of Ypsilanti, died September 30. H was 72.

Doctor Woods was born in Kinde and obtaine his degree in medicine from Wayne State Unive sity in 1923. Following his internship at Detroi Receiving Hospital, Doctor Woods moved to Yps lanti where he remained in practice until his sem retirement. A past president of the Alumni Ass ciation of Wayne University College of Medicin Doctor Woods was also a trustee of the school library funds. He was affiliated with Beyer M morial Hospital, Ypsilanti, and his medical fr ternity was Phi Beta Pi.

Among the survivors are two physicians, Sco W. Woods, his son, also of Ypsilanti, and a br ther, Grant John Woods of Detroit.

Doctor Woods was a Life Member of the Mic igan State Medical Society.

Warns Against Increase In Bootleg Drugs

Prohibition-style racketeers, scenting millions dollars in bootleg drugs, are beginning to invad the prescription drug market under cover of pre sure for lower prices, Lyman C. Duncan, chai man of the Pharmaceutical Manufacturers Associ tion, has reported.

A rising tide of "bootleg drugs" could impose task on Food and Drug Administration agents difficult as that of revenue agents searching f bootleg stills in Prohibition days, Mr. Dunca warned at the 1966 meeting of the National A sociation of Retail Druggists.

He said the protection once afforded docto and their patients by the manufacturer's name o his products was "in danger of being demolished by governmental action to promote the use of u branded, and presumably cheaper, drugs.

Mr. Duncan told the assemblage of retail pha macists, "The illicit industry is still relatively sma but the important thing is the seeds have bee sown and the method of operation establishe Their mushrooming growth only awaits the ope ing up of the vast new market which the campaig for generic prescribing will provide."

He said that many of the best known and mo effective drugs in use today — steroids, antibioti diuretics and others — were the object of smu glers, counterfeiters and "all the illicit makers a purveyors of drugs of unknown and unspecifi origin."

Welcome New Members . . .

on K. Alexander, M.D., 712 Thomas Court, Ann Arbor.

asar M. Alkar, M.D., Pontiac State Hospital, Pontiac.

enry D. Alkema, M.D., 245 State Street, S.E., Grand Rapids.

radley T. Barnes, M.D., 312 Maywood, Rochester.

. L. Beaghler, M.D., Barage County Memorial Hosp., L'Anse.

urand Benjamin, Jr., M.D., Pontiac Genl. Hosp. Seminole at West Huron, Pontiac.

oseph J. Bookstein, M.D., 1034 Hasper Drive, Ann Arbor.

uan C. Carioni, M.D., Wm. Beaumont Hospital, Royal Oak.

enneth W. Carman, M.D., 30928 Ford Road, Garden City.

dward F. Cashman, M.D., 18715 Bretton Drive, Detroit.

erald G. Cole, M.D., 1818 Longway Blvd., Flint.

mes W. Collins, M.D., 15870 Twelfth Street, Detroit.

mes R. Driver, M.D., 1230 Wines Drive, Ann Arbor.

rthur Lee Foley, II, M.D., 2001 Brampton Court, Ann Arbor.

evit O. Ergin, M.D., 2107 North Ballenger Highway, Flint.

rthur F. Geis, M.D., 1223 S. Park St., Kalamazoo.

. Marshall Goldberg, M.D., Hurley Hospital, Flint.

oward S. Goldberg, M.D., 24777 Greenfield Road, Southfield.

rwin Grasman, M.D., 539 Pine Street, Kalamazoo.

eridun Gurol, M.D., 32316 Grand River Ave., Farmington.

oseph Guyon, M.D., 302 West Pierson Road, Flint.

ehmet E. Halac, M.D., 163 North Avenue, Battle Creek.

. Richard Harris, M.D., 1464 Montague Ave., Muskegon.

ale W. Heeres, M.D., 1832 Fifth Street, Muskegon.

seph F. Heitsch, M.D., 3860 Lonedale Road, Pontiac.

obert D. Helferty, M.D., 1116 Ann Arbor Street, Flint.

avid C. Hislop, M.D., 3205 Belle Court, Royal Oak.

ector Inchaustegui, M.D., Wm. Beaumont Hospital, Royal Oak.

hilip J. Jackson, M.D., 23480 Church, Oak Park.

wight Jacobson, M.D., 411 Michigan National Bank, Battle Creek.

Walter H. Janke, M.D., 603 Mott Foundation Building, Flint.

Melvin Johnson, Jr., M.D., Leila Hospital, Battle Creek.

Raymond J. Karakuc, M.D., Wm. Beaumont Hosp. —Radiology, 3601 W. 13 Mile Road, Royal Oak.

Marietta J. Kaylor, M.D., 2435 Elizabeth Lake Road, Pontiac.

R. A. Kimmich, M.D., 1017 Lantern Hill Dr., East Lansing.

Marvin E. Klein, M.D., 15421 W. Nine Mile Road, Oak Park.

Marta R. Szego Koltay, M.D., Tolfree Memorial Hospital, West Branch.

Oscar P. Koltay, M.D., Tolfree Memorial Hospital, West Branch.

Harm Kraai, M.D., Medical Field Service School, Fort Sam Houston, San Antonio, Texas.

Kenneth S. Kube, M.D., Bad Axe.

Antonio A. Laxa, M.D., 14 Edgelake, Union Lake.

Douglas C. Layman, M.D., 306 Wm. Beaumont Medical Bldg., 3535 W. 13 Mile Road, Royal Oak.

Talmage D. McCallon, M.D., 3107 S. Washington, Royal Oak.

Donald W. McNaughton, M.D., 121 East Seventh Street, Flint.

Joseph F. Marshall, M.D., St. Joseph Mercy Hosp., 900 Woodward Ave., Pontiac.

Michael S. Menge, M.D., 32 Medical Village, 31816 Southfield Road, Birmingham.

Carl A. Moyer, M.D.

Kenneth W. Murray, M.D., 22 Medical Village, 31815 Southfield Road, Birmingham.

Gordon S. Musick, M.D., 31327 W. Rutland, Birmingham.

Nanjappachari, M.D., Pontiac State Hosp., Pontiac.

Milton L. Nathanson, M.D., 408 Northland Med. Bldg., 20905 Greenfield Road, Southfield.

Alex J. Norzow, M.D., Pontiac Genl. Hosp., Seminole at West Huron, Pontiac.

Wm. I. Owens, II, M.D., Pontiac Genl. Hosp., Seminole at West Huron, Pontiac.

Avni D. Ozkan, M.D., 55 Plymouth Road, N.E., Grand Rapids.

Robert C. Packer, M.D., 4065 Stamford, Muskegon.

Richard E. Pfrender, M.D., 1234 Creal Crescent, Ann Arbor.

Centa V. Poim, M.D., 10 Peterboro, Detroit.

Ward O. Powers, M.D., Jonesville.

Albert J. Pratt, M.D., Battle Creek Sanitarium, Battle Creek.

IDENTI-CODE™

(formula identification code, Lilly)

takes the guesswork out of product identification

A special letter-number symbol will appear on each Lilly capsule or tablet. By checking this code against the *Identi-Code Index*, you will be able to identify each unit quickly and accurately:

In cases of overdosage

As a safeguard against error

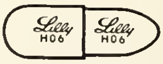
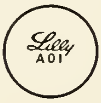
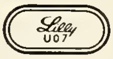
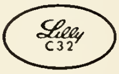
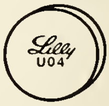
When medication was prescribed by another physician

When the prescription label is lost

During telephone conversations with patients

A complete explanation of Identi-Code and its use is provided in the *Identi-Code Index*. If you have not yet received an index, your Lilly representative will be pleased to supply you with a copy.

Representative Lilly Products Bearing Identi-Code

Pulvule®	Enseal® (enteric-release tablet, Lilly)	Capsule-Shaped Tablet	Elliptical Tablet	Round Tablet
				

ELI LILLY AND COMPANY, INDIANAPOLIS, INDIANA 46206

601553

Lilly

ORIGINAL SCIENTIFIC ARTICLE

Medical Education And the Community

By Andrew D. Hunt, Jr., M.D.
Neil F. Bracht, M.A., M.P.H.
Both of East Lansing

Educational aspects of the program and philosophical considerations behind the development of the College of Human Medicine at Michigan State University have been described.[1, 2] Strongly emphasized has been the administrative and curricular ntegration in the university so that this new medcal school is emerging as a functional part of the nstitution, with the entire range of academic disciplines being considered appropriate resources for medical education. Existing personnel and facilities are being utilized, modified, and augmented wherever appropriate and feasible and in a fashion consonant with sound educational and economic principles.

The scientific disciplines traditionally considered basic to medical education have long been in existence at this university in the form of large alluniversity departments and serving such colleges as Natural Science, Agriculture, and Veterinary Medicine. Distinguished faculty members have been recruited in these departments which are now able to assume additional educational demands of our first medical class of 26 students.

* * *

THE BEHAVIORAL SCIENCE departments of Anthropology, Sociology, and Psychology are also n a position to make fundamental contributions n helping medical students understand the nature of human normal and abnormal behavior and these departments are being appropriately augmented for effective participation in the medical program. These same departments have been inluded in the formal executive structure of the Colege of Human Medicine.

Other university departments which have been nvolved to varying degrees in planning, and members of which will be active in teaching include: Nursing, Foods and Nutrition, Statistics, Social Work, History, English, Engineering, Medical Technology, Speech & Hearing and Health Facilities Management.

Finally, and as the first clinical department in this new medical school, there has been established the Department of Medicine. In addition to teaching the usual pre-clinical skills of history taking and physical diagnosis, this department will actively participate in the central, core sequence entitled Human Biology, and designed, through laboratory, clinical, and didactic experiences, to coordinate the basic biological and behavioral knowledge into a meaningful, personal understanding of the human being.

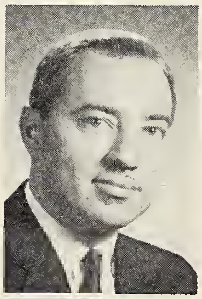
It is the human being both biologically and socially which is the basic object of inquiry of the physician. Considerable thought, planning, and developing of new and appropriate laboratory design has gone into the preparation of this program of Human Biology and it will, in due course, be the subject of publication.

* * *

THE PURPOSE OF THIS PAPER, however, is to describe the thinking, planning and administrative measures which are occurring at Michigan State University concerning the relationship of a medical school to the outside world within the context of a land-grant institution which has a fundamental mandate to, and history of, serving the people of this state in very special ways. Of special interest, for example, has been the model

Andrew D. Hunt, Jr., M.D.

Neil F. Bracht, M.A., M.P.H.



Doctor Hunt is Dean of the College of Human Medicine at Michigan State University, and Mr. Bracht is Assistant to the Dean for Extramural and Community Affairs.

set by the cooperative and continuing education extension programs which, through a decentralized mechanism, have been enormously successful in bringing modern methods and knowledge in such fields as agricultural science and home economics to virtually all sections of Michigan.

Our goal, then, is to relate the medical school to the community just as effectively and organically as it is to the university campus. The following summarizes this effort to date.

BASIC VS. APPLIED SCIENCE

Research in the basic biological sciences, essential to modern medicine, must largely be performed in a scholarly, semi-cloistered atmosphere, free to every extent possible from the exigencies of medical practice and the distractions of community activities. Furthermore, physicians endowed with research skills are often those best able to translate laboratory findings to the human situation, and these physicians need the protected "ivory tower" to make their maximum contributions.

Also, much of the medical students' basic learning, not only in the fundamental sciences, but also at the clinical level should occur in this protected, scholarly environment. It is necessary that all students of medicine learn the relevance of biological research to human disease and its treatment and develop sufficient understanding so as always to be discerning and critical of such research throughout their lives.

It is vital, therefore, that this scientific atmosphere be preserved, and the natural existence of such an atmosphere on a university campus is one of the prime reasons for the university as the preferred location for medical education.[3]

Medicine differs, however, from the pure sciences in that its primary goal is the health of the public. Clearly defined parameters of health are the measurements of the success of the medical profession and not the accumulated wisdom of its membership.

The concern here is with the application of science. Epidemiology, community organization for the delivery of health care, the role of the physician vis-a-vis the other health professions, hospital organization and medical economics represent part of the content of the knowledge involved in understanding and diagnosing the problems of the health of the public. McGavran refers to this area of knowledge in terms of the "Scientific Diagnosis and Treatment Of the Community As A Patient,"[4] and we feel that it is important for every student physician to obtain first-hand knowledge and experiences in these community aspects of medicine. In fact, it is interesting to note that the recent Stanford University Convocation of health profession students emphasized the growing interest and demand by students for this kind of direct community experience.[5]

EXTRAMURAL ROLE OF MEDICAL SCHOOL

In order to make direct community health experiences readily available to medical students and of high educational quality, the university and its medical school must jointly recognize the opportunity and assume responsibility for participation in community health development through research and demonstration applications. The Coggeshall Report[6] is clear in its recommendation regarding this point:

> *"The field of medical education needs to turn its attention to the matter of improved delivery of health services in three ways. First, those in the field of medical education themselves need to devote greater attention to studying how health care can best be provided. Second, they need to teach medical students and young physicians to provide health care in the ways that are most effective medically and efficient economically. Third, the medical school in the future can contribute significantly to the health field by providing the 'model' or 'demonstration' of how health care can best be delivered."*

With medical students working directly in the community under the auspices of the medical school, faculty and students can investigate together new and more efficient ways to utilize personnel and technology in bringing medical care to the public. Students can learn to work with patients in a community environment closely approximating a "real life" situation. In the community students can become aware of and skilled in the recognition of common and often exceedingly difficult human illnesses which are rarely seen in the university hospital; the shape of which varies considerably from community to community. Similarly the roles and responsibilities of physicians in different communities can be studied.

Just as the natural sciences laboratory is of necessity intramurally oriented so the social science and community medicine "laboratory" is focused extramurally and attached to the living organism of society. For the sociologist to understand a community's health organization, variations in disease manifestations by ethnic groups and attitudes of a population toward its medical care, he must have access to communities and their people.

For the anthropologist to ascertain reasons for non-utilization of available health resources by a population group, he must move out into such a group and obtain first-hand data. He must have easy access to families and look at the total ecology of their living situation.

In order to study new approaches to learning for retarded children the psychologist must have access to hospitals for the retarded as well as community day care centers.

Such areas of research interest are increasingly involving social scientists, and their findings have the utmost relevance to medicine. This is one of the reasons that they are considered among the basic sciences at Michigan State University.

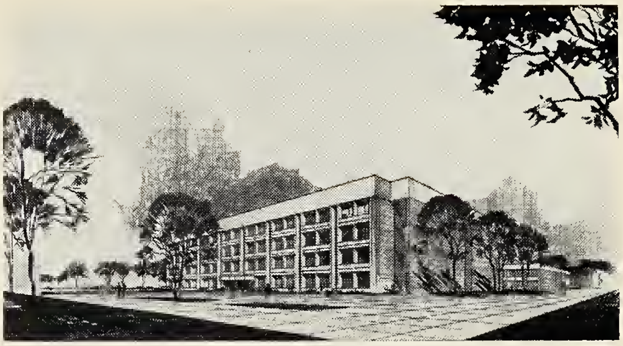
MEDICINE AND SOCIETY SEMINAR SEQUENCE

In order to lay the ground work for the students' early community laboratory experience, a three-term course entitled *Medicine and Society* has been instituted. This course, which takes the form of a seminar encourages student responsibility for planning and reporting, focuses on relevant issues which face modern medicine. The seminar helps the student gain perspective and understanding of the professional career choice he has made, the mechanisms whereby he will become a qualified member of the profession and the trends and forces in society which are impinging upon that profession and the health industry itself.

As students select topics of interest, such as "world population problems," "government and medical care," the "role of general practitioner," etc., a wide range of consultants will be available to the entire seminar group. It is also anticipated that as students prepare their reports they will do considerable "field work" in the community through surveys and research studies.

DEVELOPING A "COMMUNITY LABORATORY"

Community as a laboratory is considered in its totality with emphasis upon the completeness of the social, functional and self-reproducing population group rather than on its size alone. By such definition a large bedroom suburb of Detroit cannot be considered an ideal community laboratory for a student, whereas a small rural village might well meet the definition and be an excellent training site. What is important is that the student understands the socio-cultural context in which he is working regardless of size or complexity. In any case, metropolitan, urban, small town and rural communities are available in Michigan both for students' clinical experience and for research and demonstration projects in community health and patient care.



MSU recently announced plans for the first phase of the Life Sciences Building in the medical complex on the campus.

Our efforts in developing a "community laboratory," logically, have begun with the Lansing and Tri-County Area. Our notion of community in the context of health includes not only physicians and hospitals but also the entire range of community and governmental agencies related to the delivery of health services. Such private agencies as visiting nurse associations, family service agencies, and Catholic Social Service are included. So also are county services such as mental health programs, local public health departments and county medical facilities. Lansing, as a state capital, is strategically located because the central offices of most of the state health programs and planning agencies are located here. A wide range of expertise is immediately available from individuals in these programs.

Selected as the focus in our local effort of developing a "community laboratory" was the Greater Lansing Community Services Council because its board of trustees broadly represents the community, and as an agency of the Community Chest, functions as the coordinating body for the majority of health and welfare services in the county.

Over one year ago the executive director of the organization was consulted, and a large medical school liaison committee established. This committee numbers about fifty individuals, and includes members from most of the health and welfare agencies in the community, the county medical society, the hospital administrators, the news media, city government and the school system. This committee meets as a whole roughly three times per year, receives a report on the school's progress from the dean and his staff, from its sub-committees and discusses and plans for ways in which the medical school and the community can be mutually helpful. At present three sub-committees are active:

1) The sub-committee on Heart disease, Cancer and Stroke is functioning as the medical school's advisory council in the development of the university's contribution to the Michigan Regional Medical Program. The committee has developed a planning grant effort which would serve to insure that the new medical school and its research, teaching, and patient care facilities grow in concordance with the community and its hospitals and agencies permitting the entire city to emerge as an important regional center with the medical school performing a major role in decreasing the gap between new advances and application to patient.

2) The sub-committee on rehabilitation, working closely with Heart disease, Cancer and Stroke Committee is primarily concerned with cooperative relationships between Rehabilitation Medical Center and the medical school and is studying ways in which more effective utilization of sound rehabilitative principles can be more widely applied in nursing homes and other extended care facilities.

3) The sub-committee on poverty is concerned with ways in which the local programs of the national anti-poverty effort can profit by medical school affiliation, and with the development of demonstration and research programs in provision of health services to the poor. Such programs, with the collaboration of local hospitals and the medical society could provide enormously useful experiences for medical students as well as providing an important and often neglected service in the community.

The Community Services Council-Medical School Liaison Committee, therefore, provides the framework within which all community relationships in the Lansing area can be coordinated and interrelated. Thus, the administration of the hospital and rehabilitation medical center with which we have formal affiliation agreements are represented on the committee. Likewise, the directors of the county mental health program and of the health department have medical school faculty appointments, and are members of the committee. As working relationships with other hospitals and agencies are consummated they too will be incorporated into the committee.

* * *

AREAS OUTSIDE OF Lansing are also of great interest to us. Hospitals in several cities have made inquiries concerning eventual affiliation both to provide clinical experiences for medical students and as a force toward strengthening their programs in graduate and continuing education. Michigan State University's traditional posture gives us a special interest in the problems of medical care in rural communities. Intensive discussions are under way in two such communities, and it is hoped that our students, once we are granted the clinical years of medical student education, will have the opportunity of unusual and exciting experiences in such settings. In a third community, of the Upper Peninsula, plans are already underway for medical students to participate in summer projects in community health study and development of a comprehensive medical care program. Our assumption is that, in providing such experience, a larger percentage than usual of each medical school class will be attracted to career possibilities in such communities so sorely in need of physicians.

It is also our intention to explore ways in which the total resources of the university can enrich professional practice in remote and isolated areas of the state. We have already begun preliminary discussions with our extension centers throughout the state.

Finally, beginning tentative discussions have been held with representatives of two hospitals in Detroit. Both because of the quantity of clinical material available, and because of the extraordinary current importance of the health problems in such a city, we feel it vital that experiences be available to our students in metropolitan hospitals.

DISCUSSION

We have described briefly certain aspects of our philosopy and planning for community relationships. We wish to emphasize that these efforts, within the framework of a "two year school" stem from our recognition of the relevance and perhaps basic quality of the social sciences to health and to medical education. Once this assumption has been made, and if one agrees to the validity of community laboratory experiences for medical students in their pre-clinical years, then one must accept the need for an extramural laboratory in which the student can learn about the societal and community aspects of health and medical care.

In order to make these kinds of experiences readily available, the university and its medical school must be actively involved in community health development.[7]

* * *

IN ORDER TO implement the orientation of this new program and develop a community laboratory, one of the authors (N.B.) was recruited from the University of Kentucky School of Medicine where he was a member of the Department of Community Medicine.

By assuming the social and community aspects of medicine to be basic in medical education, and by developing in the Dean's Office a facilitating position of Extramural and Community Affairs, we have made "community medicine" an integral, core segment of the medical school. A three-term formal seminar in Medicine and Society will augment our extramural efforts and prepare students for their involvement.

Medical students, while learning anatomy, physiology, and biochemistry will at the same time be learning about the issues of health care both in the classroom and in various communities and local agencies. They will be learning about medical economics, about the epidemiology of human illness, about relationships between medical specialists, general practitioners, and other health professions. During free and elective time some students will do research in various biological fields. Others, in the community laboratory will study new approaches to patient care, or study the operation of a home care program.

Arno Weiss, Jr. and Marilyn Gifford, two of the 26 students in Michigan State University's first medical class are counseled by Thomas B. Hill, M.D., assistant to the dean of the College of Human Medicine.

* * *

THUS, STUDENTS showing early a particular aptitude for community or family medicine will have the opportunity to identify themselves during the pre-clinical years and begin to prepare themselves earlier than is usual. At a later date international health experiences may be developed for our students in this area.

The organization of this pre-clinical program will be the joint responsibility of the Dean's Office, the various departments in the social sciences, the Department of Medicine and where appropriate the involved community agency. It is our hope that students completing this pre-clinical program will be unusually sensitive to and aware of the issues of community medical care as well as being well schooled and excellently prepared in the traditional basic sciences of medicine.

They will not only be qualified to function well in such tests as the National Board Part I examinations, but will also be unusually qualified to be clinical clerks and to function as responsible members of the patient care team. We are fortunate in having an Office of Medical Education, Research and Development through which we hope to be able to study the impact and educational value of such comunity experiences.

Finally, this concept of community as an esteemed partner in the medical educational process has important implications for the style which we will adopt when we take on the clinical years and award the M.D. degree. We are certainly committed to the idea that a portion of the student's formal clinical clerkship should take place in community hospitals providing, hopefully, for all or most students urban, metropolitan and rural experiences. Our current assumption is that the first clinical year should be spent in the setting of the university hospital and clinics, in a carefully supervised situation and learning not only about the academic approach to diagnosis and treatment in the hospital, but also about the continuing comprehensive care of families in the outpatient department.

In the senior year, then, the students would be ready to assume responsibilities closely approximating those of interns in various affiliated hospitals around the state. Such a program anticipates the recommendations of the so called "Millis Commission" to abandon the traditional internship year as a separate and distinct portion of medical education.[8]

* * *

IN OTHER WORDS, "community medicine" will be "built in" to the clinical years just as community and social issues are an integral part of the pre-clinical curriculum. The eventual administrative implications of such objectives are not clear. Whether the department of medicine assumes this extramural responsibility or whether a separate Kentucky-like Department of Community Medicine develops[9] or whether such a community component becomes a part of a more traditionally named department of preventive medicine remains to be decided.

In our current proposal to the State Board of Education for full degree granting status we specifically request funds for this purpose under the rubric "family medicine," and our commitment to meeting this critical social and professional need is firm.

SUMMARY

Michigan State University's program in medical education, in accord with the Land Grant tradition, plans to be maximally responsive to social and community needs. Hence, in the pre-clinical years, the relevance of the social and behavioral sciences to medicine is recognized by including them in the administrative structure of the medical school and the "laboratory" for medical student learning is expanded extramurally so that students can learn about problems of community health care first hand and early in their careers.

Efforts made to date in the development of this community laboratory are described.

Plans for the clinical years include community medicine as an integral part of the curriculum, with decentralization in various communities throughout the state as an important feature.

Administrative implications of this program are discussed.

Study and research facilities available to Michigan State University's medical students include the Biology Research Center, at left, the new $6.6 million Chemistry Building, above, the $5.2 million Biochemistry building, center, and the $2.7 million Plant Science Laboratory, bottom. This new science complex also includes a $4.7 million Veterinary Clinic and Research Building.

REFERENCES

1. Hunt, Andrew D., Jr., M.D., "Medical Education At Michigan State," *Clinical Research*, Vol. 13, No. 3, (Oct. 1965) pp. 375-379.
2. *News and Comment*, Institute of Biology and Medicine, Michigan State University, Vols. I and II (June 1965-Sept. 1966).
3. Evans, Lester, M.D., *The Crisis in Medical Education*, University of Michigan Press, 1965.
4. McGavran, Edward G., M.D., "Scientific Diagnosis and Treatment of the Community as a Patient," *Jo. of The American Medical Association*, Vol. 152, No. 8, (Oct. 20, 1956), pp. 723.
5. Stanford University Convocation: *Student Project In Community Health Resources*, Palo Alto, California (Aug. 31-Sept. 1, 1966).
6. Coggeshall, Lowell, M.D., "Planning For Medical Progress Thru Education," a report submitted to the Executive Council of the Association of American Medical Colleges, Chicago, (1965), pp. 38.
7. "Health Is a Community Affair," preview of the final report of the National Commission on Community Health Services, *Journal of the American Medical Association*, Vol. 196, No. 4, (April 24, 1966), pp. 333.
8. "The Graduate Education of Physicians: *The Report of the Citizen's Commission on Graduate Medical Education*," The American Medical Association, Chicago, Ill. (1966).
9. Dueschle, Kurt, M.D., Fulmer, Hugh, M.D., M.P.H., "Community Medicine: A New Department at the University of Kentucky College of Medicine," *Journal of Medical Education*, Vol. 37, No. 5, (May 1962) pp. 432.

ORIGINAL
SCIENTIFIC
ARTICLE

Employment of Low Hyperbaric Therapy In Management Of Leg Ulcers

By Stanley Olejniczak, M.D.
Eloise, Michigan

We wish to report preliminary findings of treatment of leg ulcers using oxygen under pressure of 12 millimeters of mercury.

METHOD

A transparent bag* made of nylon plastic material is placed over the ulcer bearing portion of the extremity using a rubber tourniquet to hold the bag tightly applied to the leg, either below or above the knee depending on the patient's tolerance to its application. Two tubes are connected to the bag, one from the oxygen tank, and the other to the sphigmomanometer.

The bag is inflated with pure oxygen to a pressure of 10 to 12 millimeters (equivalent to approximately ¼ pounds of pressure per square inch) a level just below that of normal venous pressure. It is adjusted to the level that the patient can tolerate, and is maintained at a flow of 7 to 8 liters oxygen per minute.

Treatment requires 20 minutes during which there should be no change of color in the skin. Higher pressures are likely to induce venous stasis with resulting pain and cyanotic discoloration of the skin of the portion of the extremity enclosed within the bag.

The rubber tourniquet holding the bag below the knee should be one inch in diameter, and should be wrapped around the leg twice to prevent sliding of the bag upward when it is inflated to the desired pressure.

As soon as the pressure of oxygen reaches the desired level, the patient should feel relieved of pain caused by the ulcer. It has often happened that the comfort induced by the treatment affords the patient a refreshing night's sleep, which may be the first he has experienced in many months. Within a few minutes of onset of treatment, one may observe a rapid change in color of the ulcer from dark to bright red.

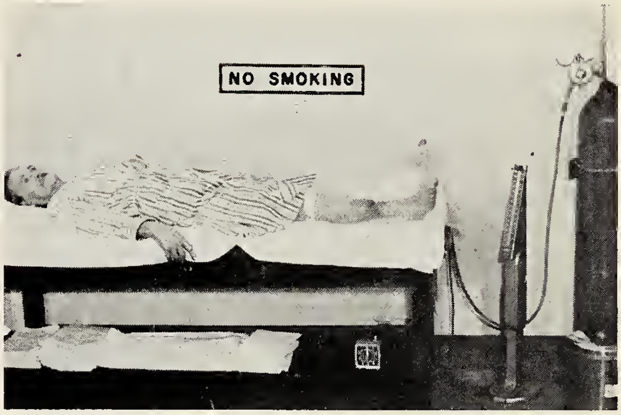


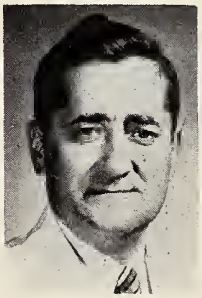
Photo of patient receiving low hyperbaric therapy.

Treatment longer than 20 minutes may cause lymphedema and discomfort. The treatments are

TABLE I.

RESULTS OF TREATMENT OF LEG ULCERS EXPOSED TO OXYGEN UNDER PRESSURE (12 MM OF MERCURY)

ETIOLOGY OF THE ULCER	NO. OF PATIENTS		RESULTS OF TREATMENT	
	FEMALE	MALE	PARTIALLY OR COMPLETELY HEALED	FAILED TO HEAL
PHLEBITIS	11	10	21	0
VARICOSE VEINS	8	5	13	0
ARTERIOSCLEROSIS	10	5	11	4
BURN	1	0	1	0
FRACTURE	3	2	5	0
LOCAL INFECTION	2	2	4	0



Author
Stanley Olejniczak, M.D.

Doctor Olejniczak is Director of the Department of Physical Medicine and Rehabilitation of the Wayne County General Hospital, Eloise.

* *Plastic bags are available through Star Research Co., 25079 Friar Lane, Southfield, Michigan 48075*

applied once, and preferably twice daily. Following the treatment a dressing moistened with normal saline solution is applied to the ulcer. An elastic bandage may serve to prevent recurrence of edema, if present. The length of treatment varies. Ulcers of smaller size may heal within a short time, whereas large granulating ulcers, freed of infection, may require skin grafting.

RESULTS OF TREATMENT

During the past 1½ years, we have treated a total of 59 patients. The etiology of these ulcers is indicated in Table 1. All were ambulatory except 4 who initially were unable to walk until their associated severe infection and cellulitis was cleared. Fifty-five patients manifested considerable to complete healing of the ulcer. In 39 the ulcer healed completely and in the remaining 16 a skin graft was applied or the patient discontinued treatment after having shown partial improvement.

Four patients, suffering severe infection and cellulitis, in whom other methods of conservative treatment had failed, improved so markedly under the treatment here outlined that previously contemplated amputation of the leg was not carried out. Four patients with severe, far-advanced arteriosclerosis and gangrene, however, failed to improve.

COMMENT

The method is simple and inexpensive. It is believed to be beneficial by virtue of the ready absorption of oxygen by the granulation tissue, as evidenced by change of color from dark red to bright red and by stimulation to healing by the constant pressure on the tissues. It is hoped that others also will investigate this method of treatment which appears to be so encouraging.

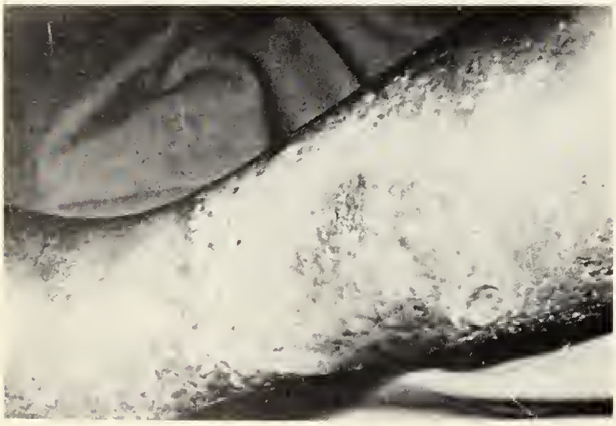


PHOTO 1

Patient, 78 years old. Stasis ulcer of 2 years' duration. Not responding to any form of treatment. Picture taken before treatment.

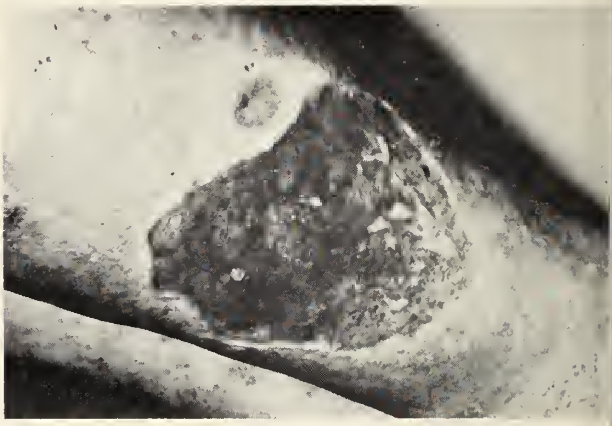


PHOTO 2

3 weeks after treatment with low hyperbaric oxygen. B.i.d. for 20 minutes.

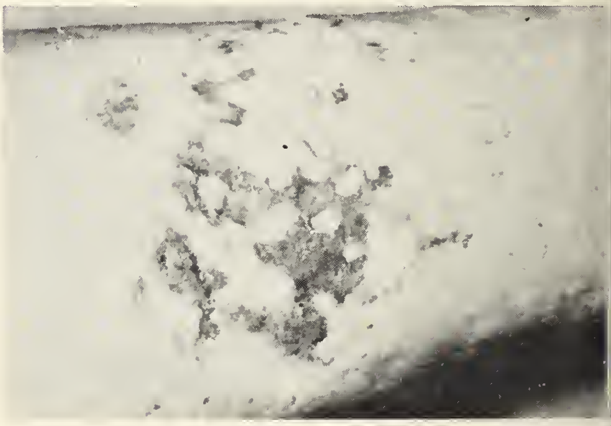


PHOTO 3

After 1½ months

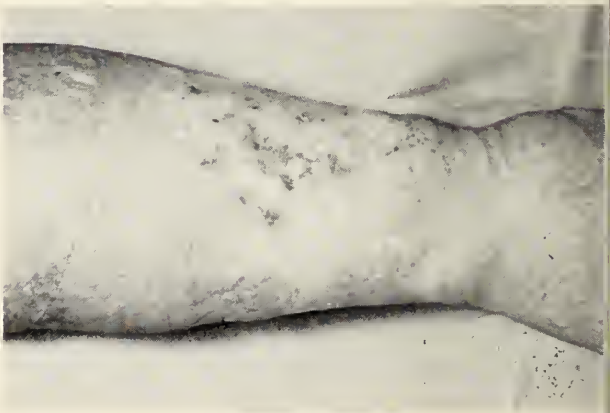


PHOTO 4

At the end of 2½ months of treatment.

Abstract — A case of Hand-Schuller-Christian disease followed by pregnancy is reported as the second case report in the literature. The reasons of the rare association of pregnancy and this disease and of pelvic deformity are discussed.

ORIGINAL SCIENTIFIC ARTICLE

Hand-Schuller-Christian Disease And Pregnancy

By William S. Floyd, M.D., F.A.C.O.G.
S. Leonard Cohn, M.D., F.A.C.O.G.
Both of Detroit

Hand-Schuller-Christian disease is rare and usually limited to children. Lichtenstein suggested "histiocytosis-X" to describe eosinophilic granuloma, Letterer-Siwe disease, and Hand-Schuller-Christian disease.[1] Farber concluded that these diseases represent different manifestations of the same process. Eosinophilic granuloma of bone is the local benign form. Letterer-Siwe disease is subacute or acute and usually fatal.

Hand-Schuller-Christian disease is chronic and may be associated with exopthalmus, skull lesions, diabetes insipidus, and mental retardation. The basic lesions are reticuloendothelial hyperplasia and granulomatosis, with questionable cholesterol deposition in histiocytes.

Morrish and Newhall reported the first case of pregnancy associated with Hand-Schuller-Christian disease.[2] It is rarely reported as an obstetrical complication because of its rarity of recognition, predilection for males, high mortality when it occurs during infancy, and possible pituitary involvement with infertility.

Case Report

M. M. was a 24-year-old white female who was first seen during her second pregnancy on February 12, 1965. She had previously been diagnosed and treated at the New York Hospital of the Cornell Medical Center at age 2 years for Hand-Schuller-Christian disease when she developed pain in the left hip and a limp. The diagnosis was established by biopsy of a femoral lesion found on X-ray. The disease destroyed a large segment of the femur. Radiographic bone survey revealed a similar lesion on the 12th dorsal vertebra. At the age of two years and nine months, she was readmitted to the New York Hospital Cornell Medical Center for excision of the vertebral lesion, radiotherapy, and application of a body cast.

At the age of three years the cast was removed and a second course of radiotherapy delivered to the spine.

When five years old, she developed a constant pain in the left shoulder. X-ray revealed a lesion of the left humerus which was biopsied and treated with radiotherapy. She responded well and no subsequent lesions have developed. Some bone regeneration occurred in the treated areas.

The patient was first seen by us on September 27, 1963 during the second month of her first pregnancy. General physical and pelvic findings were not remarkable except for borderline pelvic measurements. Two days before her E.D.C. the fetal heart tones were inaudible. Three days later she delivered a stillborn female infant with a crown-heel measurement of 34 cm. and a weight of 2,045 grams. There was hyperemia of the cord with torsion at the umbilicus.

After a period of infertility she conceived again with an E.D.C. of September 25, 1965. Ten days before expected confinement and after X-ray confirmation of fetal maturity, a normal six pound seven ounce male infant was delivered by Cesarean section.

Doctor Floyd is assistant professor of obstetrics and gynecology, Wayne State University College of Medicine, and Doctor Cohn is instructor in the same department at WSU.

Discussion

The stillbirth with her first pregnancy may have been unrelated to Hand-Schuller-Christian disease but associated placental dysfunction may occur. Infertility may result from histiocytosis of the pituitary with disruption of the normal gonadotrophin function. In the absence of hypothalmic and pituitary lesions, normal ovulation may occur.

Pelvic contraction was found in this patient and the one reported previously. This may be attributed to the disease and resulting inactivity during childhood.

Limited experience with the combination of Hand-Schuller-Christian disease and pregnancy have not disclosed impairment of placental function. However, further clinical experience and endocrine analysis are required to resolve this issue.

Summary

A case of Hand-Schuller-Christian disease followed by pregnancy is presented, and possible reasons for the rarity of this combination discussed.

We wish to express our appreciation to Doctor T. N. Evans, Chairman Department of Obstetrics and Gynecology, Wayne State University School of Medicine, for his helpful suggestions.

BIBLIOGRAPHY

1. Lichtenstein, L., Histiocytosis X: Intergration of eosinophilic granuloma of bone, "Letterer-Siwe Disease," and "Hand-Schuller-Christian Disease" as related manifestations of a single nosologic entity, A.M.A. Arch. Path., 56:84, 1953.
2. Morrish, James and Newhall, Joseph, Chronic Histiocytosis X Associated with Pregnancy, Obstetrics and Gynecology 26:504, 1965.

Summary of Remarks At GR by Mudd:

The following is a summary of the comments by Emily H. Mudd, M.D., of the University of Pennsylvania, at the 1966 Annual Session on "Counseling Sexually Incompatible Marriage Partners":

Sexual incompatability in various forms and degrees is a common feature of many marital situations. Causative factors include ignorance, naivete and misinformation; inhibition and guilt over sex; and specific fears of physical harm, of unwanted pregnancy, of new contraceptives, of inheritable disease. They also include severe fatigue, whether real or an excuse to avoid sex; interpersonal conflicts focused on sex but based on needs for dominance and control and intrapsychic difficulties.

In helping the patient in these areas excellent pamphlets are available to furnish information desired by the patient and to springboard further discussion with the physician. Environmental manipulation relieves overly stressful situations, and counseling with both husband and wife highlights the reality of what is meaningful to each partner. However, the most important therapeutic factor is the attitude of the physician. If able to discuss sexual matters with knowledge, comfort and naturalness as an important part of healthy living, the patient will be reassured and encouraged to share his or her further questions of doubts.

List New Articles About Alcoholism

As MSMS conducts a special alcoholism educational effort during December and January, some members may want to read some of the recent literature in the field.

The Joint Health Library, 1790 Broadway, New York City, lists the following articles in the current issue of its Selective Index to Health Literature about Alcoholism:

Auerback, Alfred. Office management of the alcoholic. (In: GP, April 1966, v.33, pp.102-9)

Brown, E. C., Jr. and Taylor, C. E. An alcoholism treatment facility in a rural area. (In: Mental hygiene, April 1966, v50, pp. 194-98)

Haberman, P. W. Childhood symptoms in children of alcoholics and comparison group parents. (In: Jour. of marriage and the family, May 1966, v.28, pp.152-54)

Hayman, Max. The medical practitioner, alcoholism and motivation. (In: California medicine, May 1966, v.104, pp.345-51)

Moss, F. E. An educational program in the rehabilitation of alcoholics. (In: Jour. of rehabilitation, May-June 1966, v.32, pp.22-24, 43, 45)

Wright, E. R. and Hecker, A. O. Alcoholism (a need for diagnostic classification). (In: Diseases of the nervous system, April, 1966, v.27, pp. 245-48)

The Real Effect of Imipramine, Isocarboxazid and Nialamide

ORIGINAL SCIENTIFIC ARTICLE

By C. E. Schorer, M.D.
Paul Lowinger, M.D.
Shirley Dobie, Ph.D.
All of Detroit

The real or mythical value of antidepressants has been the subject of recent debate.[1] In order to help clarify the real value of Tofranil, (imipramine) Marplan (isocarboxazid) and Niamid (nialamide), these drugs have been studied at the Lafayette Clinic. We supposed at the outset that Tofranil would surpass all other drugs, and that all drugs would surpass placebo in the treatment of depressed patients not only for relief of the depression but for other symptoms as well.

Method

This double blind study began with 86 adult out-patients having an average age of 39 years. The large majority of them were white, female, high school graduates and they had been diagnosed psychoneuroses (40%), personality disorders (40%), and affective psychoses (20%). In common was one element noted in their initial evaluation: the symptom of depression.

These patients were assigned to treatment by one of the three drugs or placebo on a random basis. The medications were given in identical number of identically appearing pink capsules. On beginning the study, the patients received a fixed daily dose for Tofranil of 200 mg., for Marplan 60 mg., for Niamid 200 mg. The patients received these medications for a 12 week period with return visits at 2, 4, 8, and 12 weeks after the first visit.

Three instruments were used to measure change in these patients, a physician's rating scale, the MMPI, and an adjective check list. The latter two pencil and paper tests were given at initial and final visit. The physician's rating scale was filled out by second and third year phychiatric residents assigned to the drug clinic, part of the out-patient department. This rating scale, which was filled out on each of the five visits, contained six items including sleep, anxiety, interpersonal relations, thought disturbance, depression, and side effects. Each item could be scored on a scale from 1 to 9, where 1 represented no disturbance and 9 represented severe disturbance. The initial levels and changes of scores were compared statistically both for the individual variables and also for the sum of the five target symptoms on the physician's rating scale, which we call a total symptom score. An analysis of variance for the change scores was done with relation to the five visits, the four treatment conditions and the three diagnostic groups.

Results

Forty-four of the original group of eighty-six completed the three months study (Table 1). The changes over time for all forty-four patients were highly significant and particularly, it should be noted, for the physician's rating of depression. There was, however, no significant difference be-

TABLE 1

SUMMARY OF ANALYSES OF VARIANCE FOR PSYCHIATRIC RATINGS AND PSYCHOLOGICAL TESTS OVER A 3-MONTHS' DURATION IN ENERGIZER STUDY
N=44

Psychiatric Rating	Visits	Drugs	DXV
	F	F	
Sleep	5.68*	NS	NS
Thought Disturbance	NS	NS	NS
Interpersonal Relations	10.91**	NS	NS
Anxiety	16.05**	NS	NS
Depression	41.32**	NS	NS
Total Symptom Scale	27.88**	NS	NS
Psychological Tests			
Adjective Check List	19.99**	NS	NS
MMPI — F Scale	7.86**	NS	NS
MMPI — Anxiety Scale	9.662**	NS	NS
Clinical Variables			
Side Effects	NS	NS	NS

*p is less than .05
**p is less than .01

The three authors are all associated with the Department of Psychiatry, Wayne State University School of Medicine, and the Lafayette Clinic, Detroit.

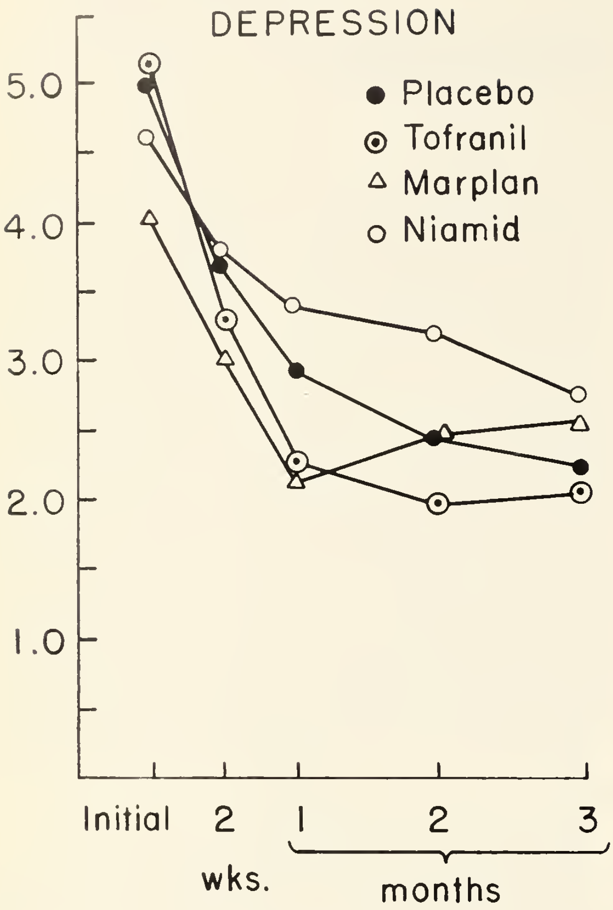


FIGURE I

tween the four treatment conditions — that is, three drugs and a placebo — nor was there any interaction between drug effect and visit effect so that one treatment condition might operate independently of the number of visits to our drug clinic. Furthermore, the changes were not related to diagnostic grouping (personality disorder, psychoneurosis, or affective psychosis). A large number of MMPI variables likewise showed significant change.

This effect of the treatment is dramatically visualized with the aid of an MMPI. For instance, a neurotic patient received Marplan. Before treatment the MMPI showed marked depression and schizophrenic scores, and after treatment showed almost complete return of all scores to the normal range.

A more detailed study of the changes may be visualized by referring to the physician's rating scale items. (Figure 1) This graph visualizes the change for depression. It shows the persistently beneficial effect upon moderately severe depression by Tofranil. *All* treatments produced improvement and there is no statistically significant difference in the amount of improvement achieved by one method compared to the others; but there is a tendency for the Marplan effect to be ephemeral.

The score of sleep, as one would expect, reflects the pattern of the score for depression. Whether this is a halo effect or not, Tofranil again surpasses all others in improving sleep, whereas Marplan has a somewhat aggravating effect. The changes for interpersonal relations are consistently good for Tofranil without the tendency shown by Marplan for letup or rebound. A similar graph of the change in anxiety, (not shown here), indicates that Tofranil surpasses all others in lowering anxiety and that Marplan is not only poorer, but also appears in the end to show a rise in anxiety.

C. E. Schorer, M.D.

Paul Lowinger, M.D.

Shirley Dobie, Ph.D.

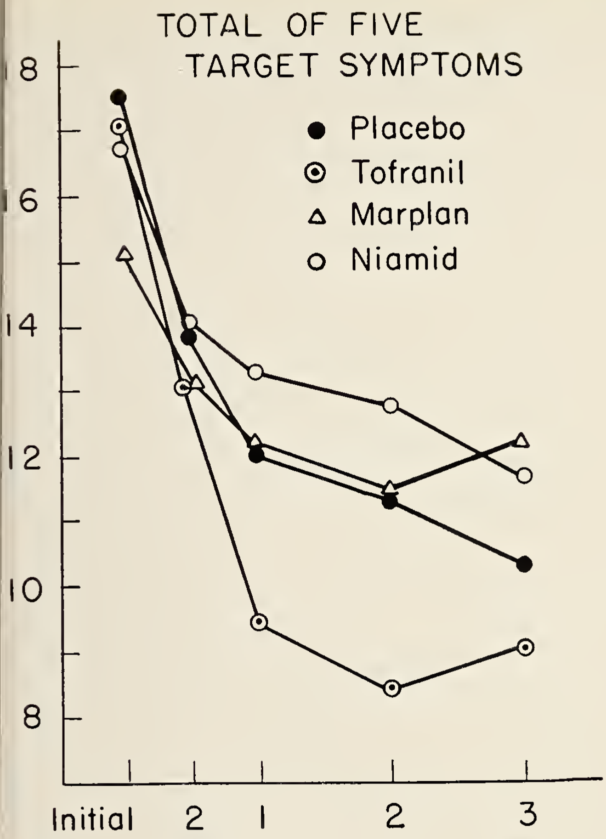


FIGURE II

The graph of the total symptoms (Figure 2) shows most clearly of all the effectiveness of Tofranil from a moderately severe disturbed overall state to a very mildly symptomatic state at termination of treatment. The same impression is gained by examining the successive MMPI anxiety scores.

Another method of illustrating the effects of this treatment is a scattergram (Figure 3). This graph divides the patients into three improvement groups based on the total symptom change score. Those who changed six or more are called markedly improved, those who changed from two to five are called mildly improved, and those who changed one or less may be considered same or worse. It should be noted that the various cut-off points, while somewhat arbitrarily assigned, might be shifted about without making drastic changes in the overall impression. Marplan and Niamid appear not to have made much reliable change compared to placebo and Tofranil. At the end of the three months period, five on placebo, nine on Tofranil, four on Marplan and seven on Niamid were considered definitely improved. At the same time, three on Marplan and two on Niamid are the same or worse.

The division of the patients into three improvement groups for each visit results in one point of statistical significance, namely at the three month visit (Table 2). On visual inspection it appears that Tofranil has successfully produced a greater percentage of markedly improved patients than any other condition, approximately 82%. Of course if one adds the mildly and the markedly improved, Tofranil and placebo are identical. Furthermore, Marplan stands out, perhaps also significantly, as being worse than placebo. Niamid comes somewhere between the apparently harmful Marplan and the apparently beneficial Tofranil.

We compared the improved with the unimproved patients with regard to various social variables. From this investigation, it appeared that these patients improved or did not improve without respect to their sex, race, marital status, education, or religion, although there was a tendency for the better educated to improve more than the poorly educated.

Discussion

The questions raised by this study are not new, but their answers may lead us to understand the real effects of these drugs. Numerous reports on the usefulness of antidepressants, especially Tofranil, cannot be ignored. Frequent qualifications in these reports, however, confirm the impression gained in our study that we need a more accurate assessment. Hare[2] noted that Tofranil compared to Dexamyl had no effect on specific clinical manifestations but had a general value, producing an "overall clinical effect" in depressive illnesses. This supports our observation of a trend for Tofranil to improve sleep, anxiety, and interpersonal relations, along with depression, and that the overall clinical effect may be something more than a simple sum of these elements. That such a concomitant effect upon the other variables along with depression is not a halo effect will be discussed in a few minutes. Meanwhile, we should remember that Tofranil is a phenothiazine-like substance which sedates animals, and was originally expected by pharmacologists to have tranquilizing properties for humans.

In another report, Pickering[3] indicated that not only was Tofranil better than placebo and phenelzine sulfate in a physician's overall rating of improvement, but also placebo was better than phenelzine sulfate. Two points should be emphasized. Pickering's report, like many in the last few years, shows that men respond better than women to these drugs. This was observed, also, in our study with Marplan, which has the highest percentage of women. Also we might keep in mind that Nardil is like Marplan and Niamid in being a monamine oxidase inhibitor of the hydrazine group.

Kimbell[1] reported that Tofranil was better than Marplan and placebo, but placebo was better than Marplan at three weeks. By twelve weeks, all groups improved significantly but no difference between groups was found in change scores rated by physicians, nurses, or MMPI tests. These terminal results are almost exactly like ours. The time effect was also shown by Haydu[4], who observed good results for Tofranil and Nardil at a fixed four week period, but poorer results if patients were scored as treatment was continued to its eventual termination. Another very real problem in measuring changes over time has been noted with neurotic patients in drug studies. Their changes show a sine wave pattern, with a period of about one month; the results, taking different intervals, are sometimes diametrically opposite.

Total Symptom-change Score	Placebo		Tofranil		Marplan		Niamid		Total	
20	1								1	
15			1						1	
14			1						1	
13	1						1		2	
10			2				2		4	
9			1						1	
8	2						1		3	
7			1		4		2		7	
6	1	⑤	3	⑨		④	1	⑦	5	㉕
5	1				2		1		4	
4	2		1		1				4	
3	1				1				2	
2	1	⑤	1	②	1	⑤	1	②	4	⑭
1					1				1	
0										
-1					2		1		3	
-10						③	1	②	1	⑤
	10		11		12		11			

FIGURE III

It is a mistake to say with Kimbell that the extent of spontaneous improvement minimizes the clinical significance of improvement with drugs. In a treatment setting such as ours (and Kimbell's) we are not seeing "spontaneous improvement." The rigorous demands for a procedural ritual of five visits establishes what we call a "visit or time effect." This might also be called "placebo psychotherapy." This must be calculated as a synergistic component with placebo medication. The placebo effect of the medication alone would have to be measured by a single visit to prescribe the medicine and some kind of later subjective or objective measure of change without the influence of repeated interviewing, testing, or laboratory procedures, all cloaked in the protection of a highly organized group activity.

This may explain where Tofranil has its greatest value. Its effects, however small, go along with

TABLE 2

PERCENTAGE OF IMPROVEMENT MEASURED BY DIFFERENCES BETWEEN RATINGS ON THE TOTAL OF FIVE TARGET SYMPTOMS FOR ENERGIZER STUDY

	N	Two Weeks			One Month			Two Months			Three Months		
		Improved	%	Worse or	Improved	%	Worse or	Improved	%	Worse or	Improved	%	Worse or
		Marked	Mild	No Change	Marked	Mild	No Change	Marked	Mild	No Change	Marked	Mild	No Change
Placebo	10	40.0	30.0	30.0	70.0	10.0	20.0	70.0	20.0	10.0	50.0	50.0	0.0
Tofranil	11	27.2	54.6	18.2	72.7	27.2	0.0	54.6	45.4	0.0	81.8	18.2	0.0
Marplan	12	8.3	41.7	50.0	33.3	25.0	41.7	25.0	50.0	25.0	33.3	41.7	25.0
Niamid	11	27.2	56.6	18.2	27.2	36.4	36.4	54.6	9.0	36.4	63.6	18.2	18.2
Total	44	25.0	45.4	29.6	50.0	25.0	25.0	50.0	31.8	18.2	54.5	31.8	13.7
			$X^2=5.93$			$X^2=9.98$			$X^2=11.17$			$X^2=12.54$	

*p is less than .05

ABSTRACT — A double blind study of imipramine, isocarboxazid, nialamide and placebo was done to compare their effectiveness in the treatment of depression. Medication was given for a twelve week period, with five scheduled visits, and a battery of measuring devices. All patients improved significantly without distinguishing the four treatment conditions except that at three months imipramine appeared more effective and isocarboxazid less effective than placebo.

visit effects. Alone, the drug might even have no effect. None of the drugs completely counteracted the visit effect. But the suggestion is made that Marplan tends to do this. It has a seemingly deleterious effect on anxiety, sleep and interpersonal relationships. Could it be that this drug, while good for depression (as an isolated symptom) causes such stimulating effects of anxiety and insomnia as to diminish the "visit effect"? These trends were noted and defeat the argument that all variables change concomitantly as a halo effect.

The study of these drugs might be criticized in a more general way. A specific scale for depression has not been used in this study. Several such scales are now available, but their usefulness has not yet been proved.[5, 6, 7] A single rating instrument will not be flexible enough to specify both the individual manifestations of diverse illnesses, such as schizophrenia and involutional depression, and a global state of health. One falls back on "overall clinical impression" because one lacks a sufficient instrument to tap the proper components and to register the appropriate total adjustment. Very likely the sum of the parts is not equal to overall adjustment.

The patient sample is too heterogenous to be sure of the results — that if anything is the lesson from Kimbell's paper on antidepressant drugs, "myth or reality." Perhaps one should systematically sample different drug-reaction groups[8], or psychotic reaction types.[9] As Sarwer-Foner[10] pointed out for tranquilizers, and Heninger[11] confirmed in a recent study, active extroverted and intellectual introverted patients might react differently to different energizers. Goldberg and Schooler[12] indicated race and sex both influence placebo effect. Hamilton[13] pointed out with respect to Tofranil and Nardil, a three way interaction can be shown with regard to male or female, agitated or retarded patients treated with one or the other drug.

In summary, the study does show convincing benefits from Tofranil and from all treatment visits. Drugs themselves may produce very little real effect and this may be only achieved with repeated ritualistic visits to a physician. But the benefit of repeated doctor-patient contact may also be vitiated with certain types of patients or with the production of heightened anxiety or insomnia. The effects of the drugs, though real, may not always be beneficial to the specific patient. Thus it is necessary that further studies be initiated to determine the patient who responds better to one class of drugs as opposed to another.

REFERENCES

1. Kimbell, I.; Overall, J.E.; and Hollister, L.E.: Antidepressant Drugs: Myth or Reality? *J. New Drugs* 5: 9-12 (Jan) 1965.
2. Hare, E.H.; McCance, C.; and McCormick, W.O.: Imipramine and "Drinamyl" in Depressive Illness: A Comparative Trial, *Br. Med. J.* 1: 818-820, 1964.
3. Pickering, G., et al: Clinical Trial of the Treatment of Depressive Illness, *Br. Med. J.* 1: 881-886 (Apr 3) 1965.
4. Haydu, G.E., et al: Differential Therapeutic Results of Three Antidepressant Medications According to Fixed or Functional Schedules, *J. Nerv. Ment. Dis.* 139: 475-478, 1964.
5. Lubin, B.: Adjective Checklists for Measurement of Depression, *Arch. Gen. Psych.* 12: 57-62 (Jan) 1965.
6. Zung, W.W.K.; A Self-Rating Depression Scale, *Arch. Gen. Psych.* 12: 63-70 (Jan) 1965.
7. Zung, W.W.K.; Richards, C.B.; and Short, M.J.: Self-Rating Depression Scale in an Outpatient Clinic, *Arch. Gen. Psych.* 13: 508-515 (Dec) 1965.
8. Klein, D.F.; and Fink, M.: Psychiatric Reaction Patterns to Imipramine, *Am. J. Psych.* 119: 432-438, 1962.
9. Lorr, M., et al: Evidence of Ten Psychotic Syndromes, *J. Consult. Psychol.* 26: 185-189, 1962.
10. Sarwer-Foner, G. J.: Recognition and Management of Drug-Induced Extra-Pyramidal Reactions and "Paradoxical" Behavioral Reactions in Psychiatry, *Canad. Med. Ass. J.*, 83: 312, 1960.
11. Heninger, G.; Dimascio, A.; and Klerman, G.L.: Personality Factors in Variability of Response to Phenothiazines, *Am. J. Psych.* 121: 1091-1094 (May) 1964.
12. Goldberg, S. C.; and Schooler, N. R.: Sex and Race Differences in Schizophrenic Prognosis, unpublished paper presented at American Psychological Association, Los Angeles, Sept, 1964.
13. Hamilton, M.: Personal Communication.

ORIGINAL
SCIENTIFIC
ARTICLE

Acute Fatal Thrombocytopenia Occurring with Clinical Rubella

Report of One Death in a Family Outbreak Involving Three Siblings

By Charles H. Sander, M.D.
East Lansing

Introduction

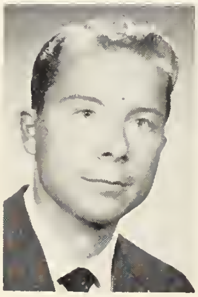
Purpura associated with acquired rubella is relatively uncommon. Death due to thrombocytopenia following rubella has been adequately documented only once.[1] Sudden death following onset of the rash during the initial phase of this disease has not been previously reported. Difference in susceptibility to the development of thrombocytopenia by members of one family affected presumably by the same virus is recorded. The possibility of an acute lethal complication in this usually benign disease is emphasized.

Case Report

A 14-year-old girl, one of three siblings, had been well until the evening of March 1, 1965 when she noted a "blood blister" on her lip. The following morning she noticed a few other red spots on her chest, neck and mouth. She felt well, however and went to school. Her teacher sent her home that day because of a "rash" breaking out on her trunk, extremities, and head. The family physician saw her shortly afterwards on the same day. A history of mild fatigue during the prior three days was obtained. There was no history of ingestion of cold tablets, vitamins, aspirin, laxatives or other medications. There had been no epistaxis, melena, hematemesis, hematuria, vomiting or diarrhea. She had bled from the vagina one day before the onset of the rash (not the expected time for her menses). Her past general health had been good. A peritonsillar abcess due to pneumococci and nonhemolytic streptococci was treated in October, 1963. Within the family there had been no similar illnesses prior to her present illness. Three other family members had recently been treated for a streptococcal sore throat.

On physical examination, the patient was a well developed moderately obese Caucasian girl not in acute distress. She was alert and cooperative. The oral temperature was 100 F (37.8 C). The skin revealed multiple petechial hemorrhages mainly on the face, neck, trunk and upper extremities. These were superimposed on an underlying maculopapular morbilliform rash. There were two subcutaneous hematomas, about 2 inches in diameter on the left arm and leg. Several small ecchymoses were present on the oral mucous membrane. The heart, lungs, abdomen and extremities were normal. There were no nerve deficits or meningeal signs. Two enlarged occipital nodes were easily palpated.

Laboratory examination at this time revealed: hemoglobin 13 gm. per 100 ml.; white-cell count



Author
Charles H. Sander, M.D.

Doctor Sander is an assistant professor of pathology, Michigan State University, College of Human Medicine; consultant in pathology, St. Lawrence Hospital, Lansing, Michigan.

,500 per cubic millimeter with 9% band forms, 3% neutrophils, 33% lymphocytes and 5% "atyp- cal lymphocytes." The platelet count was less than ,000 per cubic millimeter.

The patient was placed at bed rest. She devel- ped a headache the same evening at about mid- ight. Three hours later she convulsed and ex- ired at 6 a.m. the same morning (March 3, 1965).

Post Mortem Findings

Post mortem examination was done on the un- mbalmed body seven hours after death. The most triking external finding was the presence of mas- ive punctate and purpuric spots, irregularly dis- ributed, measuring from less than one millimeter up to one half centimeter in diameter (Fig. 1). They were diffusely scattered over the trunk, extremities, neck, and face, but were most abundant on the lateral surfaces of the upper extremities, dorsum of the hands, face, and anterior trunk.

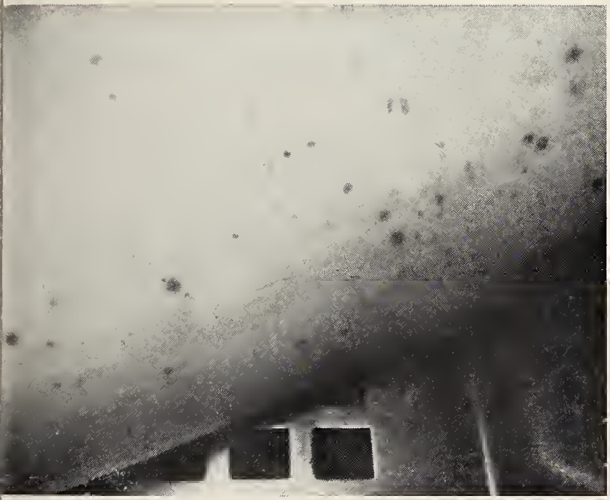


Figure 1. Purpuric spots seen at post mortem.

The scalp contained numerous areas of recent hemorrhage. The brain weighed 1,500 gms. and was edematous. The major finding was an area of intracerebral hemorrhage involving the right occipital lobe. In addition, throughout the gray and white matter there were multiple punctate hemorrhages. Microscopically, there was interstitial hemorrhage in these areas (Fig. 2). Mild edema was present in many sections. There was no evidence of meningoencephalitis. Reactive microgliosis was seen around congested blood vessels. No inclusion bodies were found.

The heart revealed numerous petechial hemorrhages beneath the epicardium and within the interstitium of the myocardium. No associated inflammatory infiltrate was present. As in other organs, vascular congestion was pronounced.

The lungs appeared consolidated. They did not collapse and stood out as "molds" of the thoracic cavities. There was massive edema. Numerous areas of subpleural hemorrhage produced a mottled appearance externally. Microscopically, there was marked diffuse vascular congestion, perivascular hemorrhage, focal intra-alveolar hemorrhage (Fig. 3) and edema, especially in the subpleural areas. The bronchi exhibited mild diffuse lymphocytic infiltrate. No inclusion bodies were seen.

Tiny submucosal hemorrhages were present in the larynx. Petechial hemorrhages were also noted within the omentum, mucosa and submucosa of the stomach and the submucosa of the small and

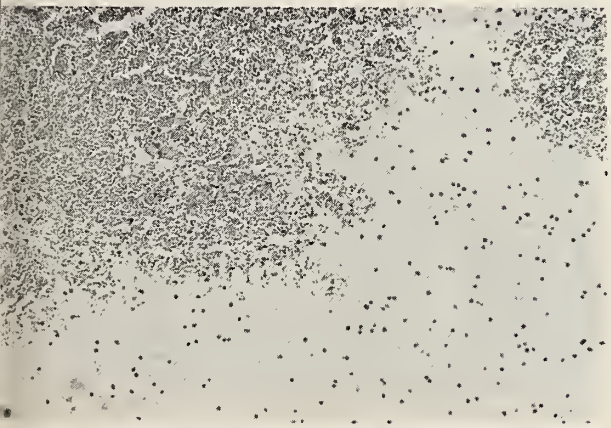


Figure 2. Interstitial intracerebral hemorrhage. (Hematoxylin and Eosin Stain X40).

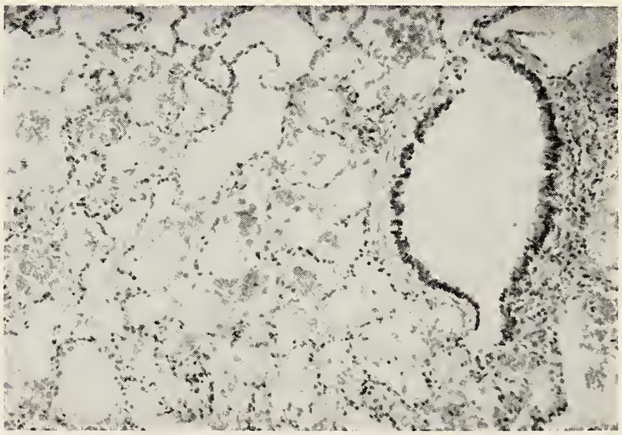


Figure 3. Intra-alveolar hemorrhage (Hematoxylin and Eosin Stain X100).

large intestine. The kidneys revealed areas of hemorrhage within the calyces. Microscopically, there was hemorrhagic infiltration of the pelvic connective tissue. The vessels were congested and there was perivascular hemorrhage (Fig. 4). The glomeruli were unremarkable. The right ovary contained an area of hemorrhage measuring 4 centimeters in diameter. The liver architecture was intact. The portal triads contained a mononuclear cell infiltrate made up chiefly of normal appearing lymphocytes. In the adrenal glands there was marked "tubular degeneration" of the cortex involving primarily the zona glomerulosa. The sinusoids were intensely congested.

Within the lymphoreticular system there was gross enlargement of the mesenteric, mediastinal and retroperitoneal lymph nodes which was not massive, the largest node measuring 2 centimeters in diameter. Microscopically, there was prominence of the lymphoid tissue throughout the gastrointestinal tract, mesentery, periaortic and peripancreatic nodes. In all other nodes examined there was a marked reticuloendothelial hyperplasia (Fig. 5). The spleen weighed 275 gms. and was soft. The white pulp was prominent and there was microscopic lymphoid and reticuloendothelial hyperplasia.

The bone marrow was pale brown. Numerous sections were studied including the calvarium, vertebral bodies and ribs. All revealed a normal ratio of cells to adipose tissue. Adequate numbers of megakaryocytes were present, revealing normal nuclear segmentation (Fig. 6). Vessels and bony trabeculae were unremarkable. Erythropoiesis appeared normal.

Laboratory studies from material obtained at post mortem examination contributed the following information. Cultures from blood and brain revealed no growth. Cultures from skin revealed few gram-positive cocci; from the spinal cord, coagulase negative staphylococcus albus. The presumptive test for heterophile antibodies was positive to a dilution of 1:7 only. Leukocyte count was 17,600 per cubic millimeter with a differential of 15% neutrophils, 12% band forms, 71% lymph-

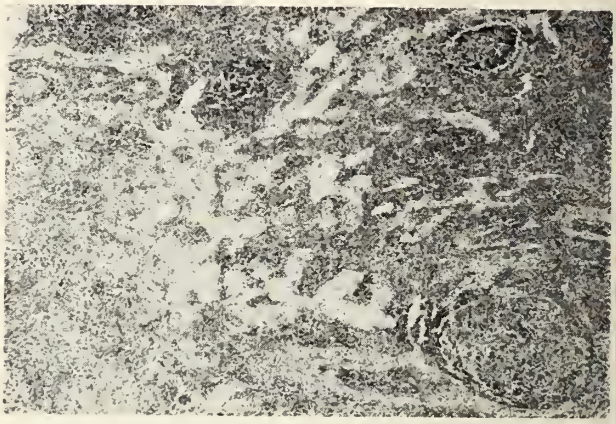


Figure 5. Lymph node exhibiting reticuloendothelial hyperplasia (Hematoxylin and Eosin Stain X10).

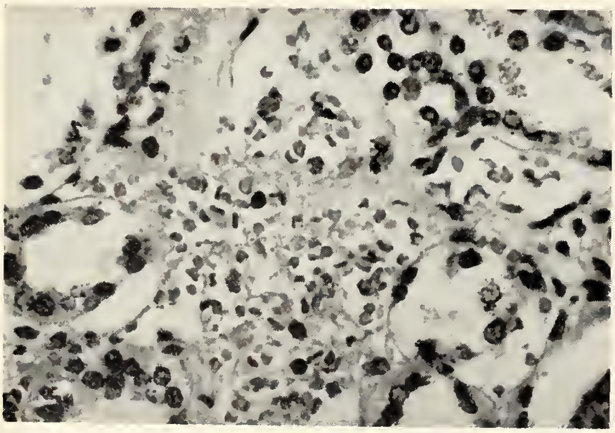


Figure 4. Intrarenal hemorrhage (Hematoxylin and Eosin Stain X160).

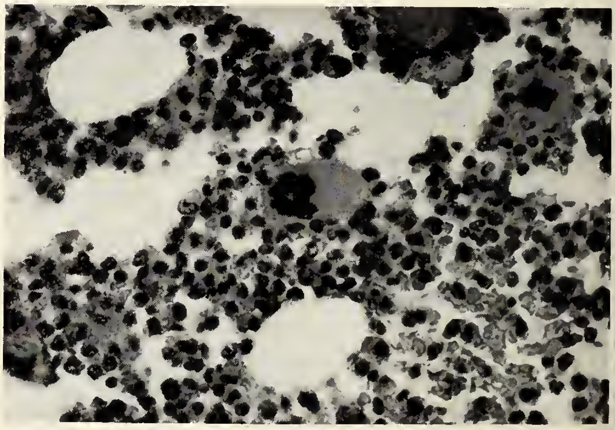


Figure 6. Megakaryocytes in the bone marrow revealing normal nuclear segmentation. (Hematoxylin and Eosin Stain X160).

ocytes and 2% monocytes. "Atypical" lymphocytes and an occasional microspherocyte were noted. No platelets were seen. A single serum specimen, blood, stool and a portion of spinal cord were sent to the Virology Section, Michigan Department of Public Health, Lansing, Michigan and to the Communicable Disease Center Laboratory Branch, Atlanta, Georgia. The Michigan Department of Public Health laboratory inoculated these materials into primary Rhesus monkey kidney, Hela, HEp. no. 2 and 24-hour-old mice. No viral agent was isolated. Complement fixing antibody titers to the following viral agents were: Echovirus type 9 1:16, mumps 1:8, Herpes simplex less than 1:8. measles (rubeola) less than 1:8. Serum forwarded to the Communicable Disease Center Laboratory Branch in Atlanta revealed a fluorescent antibody titer of less than 1:4 against rubella virus. Both the Communicable Disease Center and the Michigan Department of Public Health failed to isolate an interfering agent in primary African green monkey kidney cells.

Follow-up studies involving the family of this child were quite significant. Approximately two and one-half weeks later two siblings, one brother age 6 years and one sister age 15 years developed occipital lymphadenopathy and a maculopapular rash. This was diagnosed clinically as rubella. Both siblings revealed slight leukopenia (4,400 and 5,500 per cubic millimeter.) Differential smears and platelet counts were not done, however, there was no overt bleeding tendency noted. Blood and stool specimens as well as throat swabs were sent for examination to the Michigan Department of Public Health Laboratories. An interfering agent was isolated in African green monkey kidney cells from the male sibling. This was interpreted as probable rubella. Subsequently, three week interval paired acute and convalescent sera from both siblings were forwarded to the Communicable Disease Center in Atlanta, Georgia. Using the fluorescent antibody technique, a rise in titer of from less than 1:4 to 1:64 was observed in the male and from 1:8 to 1:32 in the female sibling. These results are compatible with current rubella infection. Both children are now completely recovered with no sequelae.

Discussion

Thrombocytopenic purpura has been recognized as a complication of both congenital and acquired rubella. Recently, this condition has been emphasized as part of the congenital rubella syndrome [2, 3, 4]. As a complication of acquired rubella it is relatively rare[3, 5, 6].

As of 1966, about 75 cases of thrombocytopenia associated with acquired rubella have been reported[7]. Their occurrence in conjunction with rubella epidemics has been emphasized[6, 7, 8]. One fatality is adequately documented[1]. This death occurred nine days after the clinical rash due to intracerebral hemorrhage in a 9-year-old boy. One additional fatality was recently reported [7]. This occurred post-operatively following splenectomy and post-mortem examination was not done. The authors mention cerebral hemorrhage as a possible cause of death.

The usual mechanism of death secondary to thrombocytopenia of any cause is intracerebral hemorrhage[5]. The cause of death in the present case is similar to those previously reported. The abruptness of these complications with thrombocytopenia following nonepidemic clinical rubella stimulated documentation of this case.

In nonfatal cases of thrombocytopenia following acquired rubella, thrombocytopenia has occurred usually between 2 days and 2 weeks following the rash,[9] most commonly on the third or fourth day[7, 10, 11]. One case has been recorded wherein the rubella rash and the purpuric lesions appeared simultaneously[12], however, this case was also complicated by encephalitis. This sequential variation is not surprising as rubella virus has been found in the pharynx as early as seven days before and as late as 21 days after the appearance of the rash[13].

It is emphasized that the severity of rubella symptoms bears no relation to the development or degree of thrombocytopenia[1, 7]. This is observed also in the present case wherein different members of the same family exposed presumably to the same virus developed quite different clinical manifestations.

Although serologic and cultural evidence of rubella infection were not documented from postmortem specimens in this case, the diagnosis of rubella on clinical grounds seems justified. This is substantiated by the subsequent clinical manifestations in two siblings approximately two and one-half weeks later (the accepted incubation period for rubella), whose sera by the fluorescent antibody technique were considered compatible with recent rubella infection. Further support comes from the isolation of an interfering agent in African green monkey kidney cells in one sibling.

Death resulting from any complication of acquired rubella is rare. Few descriptions of the pathologic changes in acquired rubella are available. As this is the second case documented by autopsy of fatal thrombocytopenia in acquired rubella, the pathologic findings with comparison to the previous fatal case are included.

Pathologic changes in this infection are usually described as nonspecific, consisting most commonly of lymphadenopathy[14], splenomegaly, reticuloendothelial hyperplasia and rarely neuritis [15] and arthritis[15, 16, 17]. Meningoencephalitis is less frequent than that found in rubeola but is associated with a higher mortality (20%)[15]. It is also significant that the death rate due to thrombocytopenia in rubeola is as high as 22.7%.[18]. The peripheral blood in acquired rubella may reveal leukopenia, lymphocytosis, plasmocytosis, "Turk" irritation cells, "atypical" and/or "degenerated" lymphocytes[7, 19, 20]. The latter are described as being different from the atypical cells seen in infectious mononucleosis[20]. None of these changes are pathognomonic. Megakaryocytes in the bone marrow associated with thrombocytopenia in rubella are described as being normal[1], hyperplastic[5] or decreased[9]. Significant inhibition of platelet production has been observed[6, 7, 9].

Comparing the pathologic changes observed in the present case with previous descriptions [1, 14], reticuloendothelial hyperplasia of lymph nodes and spleen and a normal post mortem bone marrow were found. The peripheral blood revealed abnormal lymphocytes and markedly reduced platelets both before and after death. Similarities between this and the previously documented fatal case were; submucosal, serosal, intracerebral, intra-alveolar and intrarenal hemorrhage.

The presence of atypical lymphocytes, rash, fever and lymphadenopathy might suggest a clinical diagnosis of infectious mononucleosis and indeed this was considered in this case both before and after death. Absence of the histologic changes associated with infectious mononucleosis and subsequent clinical and serologic data in two siblings make the diagnosis of infectious mononucleosis quite unlikely. Thrombocytopenia is well known as a complication of infectious mononucleosis[19]. This further emphasizes the need for complete hematologic evaluation in patients presenting with rash, lymphadenopathy and fever with or without signs of bleeding.

Certain viral diseases encountered today may have a greater propensity for production of thrombocytopenia and its sequelae than has been noted in the past. Bayer[3] suggests that more recent viral strains may represent mutants with an exaggerated capacity for the production of purpuric manifestations although not more virulent in other respects. This seems quite probable as over half of the cases of thrombocytopenic purpura following rubella reported since the first documented case in 1929 have been in the last six years[7]. This may be due in part to previous overdiagnosis of idiopathic thrombocytopenic purpura in which many cases thus classified were actually virtal entities[11].

In regard to the mechanism of thrombocytopenia, much evidence exists that it is immunological in nature involving platelet antibodies[3, 10, 11, 21]. Others suggest that the major factor causing hemorrhage is increased capillary fragility, although the degree of fragility does not appear to correlate with the platelet count[6]. A differential susceptibility to the development of

Abstract — This paper describes a rare case of fatal acute thrombocytopenia in rubella. The same viral disease subsequently occurred in two siblings without this complication. Such variation in response to a common virus is emphasized. The pathologic changes, pathogenesis and clinical course are described and discussed with reference to previous observations.

thrombocytopenia and hemorrhage between individuals has been noted[1]. This author suggests that purpura in certain cases is due to an unusual susceptibility of the patient's tissues to the infection. It does appear that bleeding tendencies in rubella are due to factors other than thrombocytopenia alone.

Considering these possible mechanisms participating in the production of hemorrhagic complications in certain cases of rubella, steroid therapy seems indicated. These agents because of their effects on vascular integrity and immunologic suppression have been recommended[5, 7, 16, 21].

The possibility of serious complications as are described in this case report should direct one's attention to routine hematologic studies in rubella and other usually benign viral infections. With any evidence of a bleeding tendency, therapy so directed should begin at once.

Summary

A case of fatal thrombocytopenia occurring with the onset of clinical rubella is described. Clinical and serologic evidence for rubella occurred in two siblings approximately two and one-half weeks later. The rarity of fatalities due to thrombocytopenia in this usually benign disease as well as the differential susceptibility by members of the same family to this complication are emphasized. The mechanisms of thrombocytopenia in rubella are discussed. Clinical and laboratory evidence of bleeding tendencies in this and other benign viral entities deserves serious consideration of prompt treatment with steroid agents.

* * *

(I am indebted to Dr. Maurice E. Becker of the Michigan Department of Public Health for assistance with the virologic studies, to Dr. Harold J. Lambert, formerly of that department, for his help with the epidemiologic data and to Dr. Stanley Robinson for the clinical information.)

References

1. Acroyd, J. F. Three cases of thrombocytopenic purpura occurring after rubella; with review of purpura associated with infections. Quart. J. Med. 18:299-318, 1949.
2. Rudolph, A. J., *et al.*, Transplacental rubella infection in newly born infants. J.A.M.A. 191:139-141, 1965.
3. Bayer, W. L., *et al.*, Purpura in congenital and acquired rubella. New Eng. J. Med. 273:1362-1366, 1965.
4. Cooper, L. Z., *et al.*, Neonatal thrombocytopenic purpura and other manifestations of rubella contracted in utero. Am. J. Dis. Child. 110:416-427, 1965.
5. Adkins, A. T. and Fernbach, D. J. Thrombocytopenic purpura following rubella. J.A.M.A. 193:143-145, 1965.
6. Lokietz, H. and Reynolds, F. A. Post rubella thrombocytopenic purpura: report of nine new cases and review of published cases. J. Lancet 85:226-230, 1965.
7. Morse, E. E., Zinkham, W. H., and Jackson, D. P. Thrombocytopenic purpura following rubella infection in children and adults. Arch. Int. Med. 117:573-579, 1966.
8. Sladden, R. A. Thrombocytopenic purpura and rubella. Brit. M. J. 2:1587-1588, 1963.
9. Wallace, D. C. A case of thrombocytopenic purpura due to rubella. M. J. Australia. 2:97-98, 1964.
10. Svenningsen, N. W. Thrombocytopenia after rubella. Acta Paediat. Scandinav. 54:97-100, 1965.
11. Ferguson, A. W. Rubella as a cause of thrombocytopenic purpura. Pediatrics 25:400-408, 1960.
12. Steen, E., and Trop, K. H. Eneephalitis and thrombocytopenic purpura after rubella. Arch. Dis. Child. 31:470, 1956.
13. Green, R. H., *et al.*, Studies of the natural history and prevention of rubella. Am. J. Dis. Child. 110:348-365, 1965.
14. Stowens, D. Pediatric Pathology. 847 pp. Baltimore: Williams and Wilkins, 1966.
15. Rivers, T. M. and Horsfall, F. L. Viral and Rickettsial Infections of Man. 967 pp. Philadelphia: J. B. Lippincott, 1959.
16. Johnson, R. E. and Hall, A. P. Rubella arthritis: report of cases studied by later tests. New Eng. J. Med. 258:743-745, 1958.
17. Hildebrandt, H. M. and Maassab, H. F. Rubella synovitis in a one-year-old patient. New Eng. J. Med. 274:1428-1430, 1966.
18. Hudson, J. B., Weinstein, L. and Chang, T. W. Thrombocytopenic purpura in measles. J. Pediat. 48: 48-56, 1956.
19. Wintrobe, M. M. Clinical Hematology. 1186 pp. Philadelphia: Lea & Febiger, 1961.
20. Hillenbrand, F. K. M. The blood picture in rubella. Lancet 2:66-68, 1956.
21. Wallace, S. J. Thrombocytopenic purpura after rubella. Lancet 1:139-141, 1963.

AMA-ERF Helps Students

The American Medical Association Education and Research Foundation loan guarantee program is one of the major sources of support for medical students, interns and residents who need assistance in financing their education and training. Since 1962, the program has guaranteed more than 27,500 loans valued in excess of $32,000,000.

AMA Explains Changes In Loan Program

FROM THE AMA

"For the past four and a half years, the AMA Education and Research Foundation has been operating a program which guarantees bank loans to those in medical training. More than 32,000 loans, over $35,000,000 in principal amount have been made to borrowers who needed additional funds for essential living and training expenses.

"We are proud of the fact that no legitimate request for loan funds has been turned down. We feel that this program has played an important part in helping young people overcome financial obstacles which otherwise may have proved insurmountable.

"During the past year the availability of money for loans of all kinds has declined sharply. Many economists have tried to pinpoint the cause of the shortage of credit. The consensus is that the economy cannot absorb the combined impact of a large domestic welfare program and a war.

"This combination of economic pressures has created a shortage of money, and has forced the banking system to raise the cost of funds (interest rates) and curtail lending. Because of this general curtailment of loans, two of the three banks in the AMA-ERF loan guarantee program have terminated their agreements to lend money through the program. The third bank, Continental Illinois National Bank and Trust Company of Chicago, has stated that it must limit aggregate new loans to the amount being repaid on outstanding loans.

"It is therefore with sincere regret that we now inform you that the AMA-ERF board of directors, meeting on October 28, was forced to curtail the loan guarantee program for a temporary but indefinite period.

"Effective November 1, loans under this program must be limited to $750 per borrower per year. This step was necessary in order to spread the limited available funds as far as possible.

"In addition, the interim interest rate will be increased from 6 per cent to 7 per cent. The new rate reflects recent increases in the bank prime rate, now at 6 per cent, and our contract with the bank requires this adjustment.

"For those who wish to make application for loans, the following guidelines will apply:

1. Application material will continue to be available from deans of medical schools and hospital administrators. In addition to the normal application forms, all medical students must obtain a statement from the dean's office attesting to the student's need for the loan.
2. Application material should be sent, as at present, to the Continental Illinois National Bank and Trust Company of Chicago, the institution making loans under this program.
3. Effective November 1, 1966, applicants will be eligible to borrow $750 per year.
4. The increase in the interim interest rate will apply to new loans. It will not affect loans made previously. The payout interest rate will remain at 7 per cent.

"We can make no prediction as to when the program will return to its former scale. Certainly, the national credit shortage is an overriding factor and the federal government has taken only a few steps to stop the inflationary spiral behind the shortage in this election year.

"We assure you that we have been making an extensive search for additional sources of credit, and this search will continue. At such time as the general economic climate improves, we are hopeful that we can restore the program to its previous level and continue to make a significant contribution to the financial peace of mind of students and physicians in training."

Bay City Woman Named Medical Assistant of the Year

Pauline Moore, assistant to Dr. E. E. Taheri, was named Michigan's most Outstanding Medical Assistant of 1966 during the Michigan State Medical Assistant Society convention in Grand Rapids. She was cited for her "outstanding and faithful performance of duty." Four other Michigan assistants were in contention for the high honor.

During her seven years with Dr. Taheri she has worked in the capacity of electroencephalogram technician, secretary and office manager. She received her Electroencephalography training at the University of Illinois.

Mrs. Moore has served the Bay County MAS in the capacity of president, recording secretary and treasurer. She has also been chairman of several committees and last April was chairman of the ninth Educational Seminar of the MMAS which was held in Bay City.

AMA Magazine Lauds Services Of Dr. Towsley

(In each issue the **PR Doctor** *publication of the AMA features one of the outstanding physicians of the nation. The feature, called "Society Stem Winders" spotlights Harry A. Towsley, M.D., of Ann Arbor, in its current issue. Here is the article:)*

Harry A. Towsley has two main interests: the healthiest children and the best-informed doctors possible.

For him the two go hand-in-hand. He is a professor of pediatrics and associate director of the Department of Postgraduate Medicine in the University of Michigan Medical School. As one of the guiding spirits at the University, he is a leader in developing the C. S. Mott Children's Hospital and the new center for continuing medical education, both at the U-M Medical Center. The latter will be built with a generous gift from the Harry and Margaret Towsley Foundation.

Michigan's program for continuing medical education, which draws some 2,500 physicians to the Ann Arbor campus for short courses each year, is considered one of the best in the nation. With construction of the new center, Doctor Towsley and Director John M. Sheldon, M.D., plan to improve the program.

With this in mind, Doctor Towsley is taking six months' sabbatical leave this year to consult with other specialists in postgraduate medical education throughout the United States. He will be paying special attention to pediatric education with an eye toward making Mott Hospital an ideal place for residency training.

Doctor Towsley is fondly regarded around the Medical Center as "Mr. Alumnus." First, he received his M.D. at the University in 1931 and has been on the faculty for the past 31 years. But he is also vice-chairman of the 10,000-member Medical Center Alumni Society and a prime mover in the annual MCAS conference and reunion — an event which combines professional education with football and fun.

As editor of the Medical Center *Journal* he has promoted articles of genuine immediate value to practicing physicians. In organized medicine, his achievements have been equally recognized with election to the presidency of the Washtenaw County Medical Society, the chairmanship of the Michigan chapter of the American Academy of Pediatrics, and the presidency of the national Academy.

His acumen in public and community relations was employed as chairman of the MSMS Scientific Radio Committee which provides 15-minute tapes for 30 stations each week, and he lends his counsel to the Society's committees on child welfare, iodized salt, preventive medicine, and legal affairs. A leader in civic affairs as well, Doctor Towsley is vice president of the Michigan United Fund, a director of the Michigan Association for Retarded Children, active in the state Health Council and a booster of the Ann Arbor Chamber of Commerce.

With this schedule, it's lucky he has a charming wife and five daughters to keep the home fires burning!

Activities Encouraged Between Professions

Many county medical societies work to establish and maintain a good relationship among the professions. The Oakland County Medical Society's efforts in this area typify the work done by other county societies.

A case in point was in September when the physicians, lawyers, dentists and pharmacists of Oakland County jointly held a party at the Edgewood Country Club.

Later, in October, the Oakland Medical Society joined the County Dental Society in an evening program to hear the past president of the AMA, James Z. Appel, M.D., discuss "New Health Legislation and Its Effect on the Healing Professions."

Such cooperation among the professions is to be encouraged for the benefit of all concerned.

87 Take State Exams

Eighty-seven physicians who hope to practice medicine in Michigan took examinations given by the Michigan State Board of Registration in Medicine in October.

Candidates taking the three-day tests were composed of 73 graduates of 43 foreign medical schools and 14 graduates of 10 schools in the United States and Canada.

Donovan H. Givens, Jr., M.D., administers one of the measles inoculations at Hutchins School, Detroit, during the Measles Immunization program held in the Metropolitan area.

A news conference, set up by the Michigan State Medical Society, for Detroit television and radio stations was held the week before the Measles Immunization Day. Being interviewed from left to right are Bernard D. Berman, M.D., from Oakland County, Oscar D. Stryker, M.D., Macomb County, and Louis E. Heideman, M.D., Wayne County.

SUNDAY, OCT. 23

END MEASLES

Praises 200 Doctors For Detroit Area Measles Campaign

"We are grateful for the cooperation of the medical societies, their officers and the individual physicians who gave of their time and talents. Without them the program could not have succeeded."

So declared Joe Vaughn, project coordinator for the Sunday, October 23 "End Measles Campaign" in the metropolitan Detroit area.

On October 23, 155,000 children from Wayne, Oakland and Macomb counties were given measles immunization shots. The children, some like stifflipped soldiers, others screaming all the way, poured through 157 inoculation centers from 11:00 A.M. to 3:00 P.M.

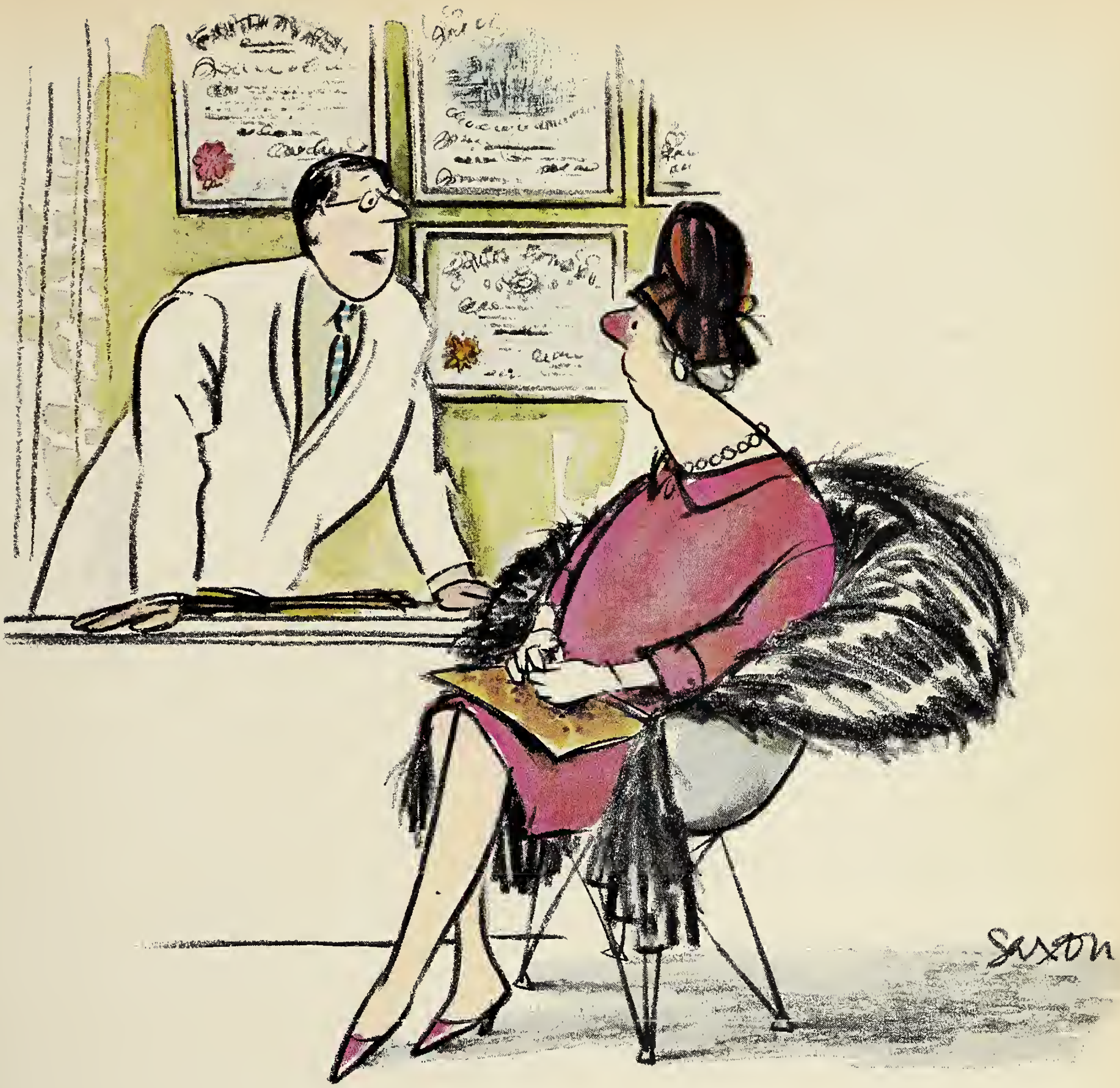
About 200 doctors and 700 nurses, plus many lay people from the tri-county area made the program, aimed at the elimination of one type of measles — virus Rubeola (common, red or hard measles), a success.

Mr. Vaughn, project coordinator, observed, "We have put a big dent in the susceptible population. The response has been simply overwhelming."

"The key to the program," Mr. Vaughn continued, "was cooperation." The boards of the three medical societies — Wayne, Oakland and Macomb all approved the project after study.

OCT. 23
7
WXYZ-TV

Helping to map out the campaign against measles in the Wayne-Oakland-Macomb area are, left to right, Bernard D. Berman, M.D., chairman from Oakland County, Joseph R. Vaughn, coordinator of the project and WXYZ-TV editorial director, and John E. Campbell, general manager of WXYZ-TV.



Now, now, Mrs. Forsythe, we've never lost a cold patient yet.

When she's experiencing acute discomfort from cold symptoms, it's small wonder the patient becomes distressed about her condition.

She will breathe easier when you prescribe Novahistine LP. Novahistine LP is a long-acting decongestant that helps restore normal mucus secretion and ciliary activity—physiologic mechanisms which prevent infection of the respiratory tract. A dose of two tablets taken in the morning and repeated in the evening will usually keep air passages clear for 24 hours.

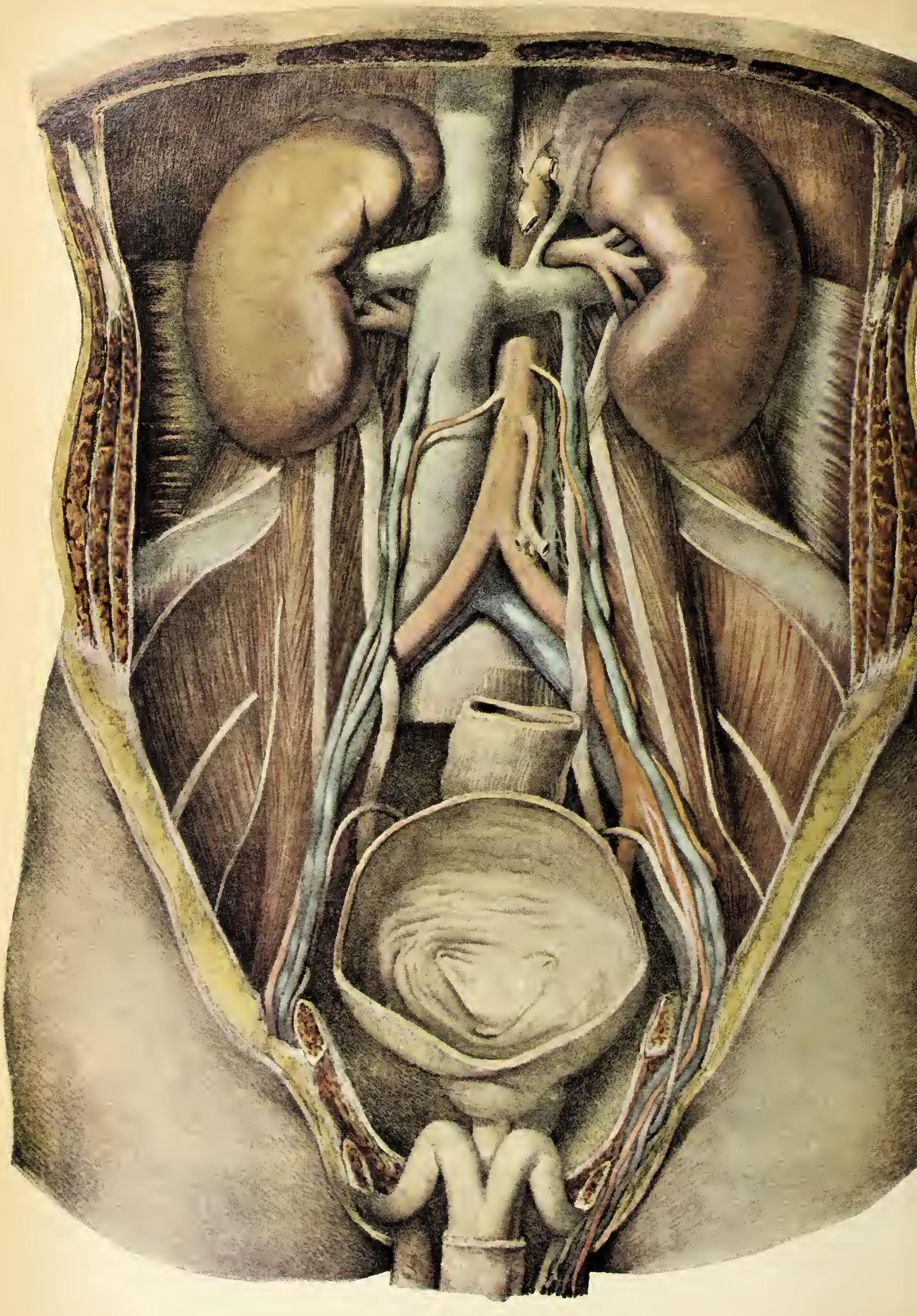
Use cautiously in individuals with severe hypertension, diabetes mellitus, hyperthyroidism or urinary retention. Caution patients who operate machinery or motor vehicles that drowsiness may result.

Each Novahistine LP tablet contains: phenylephrine hydrochloride, 25 mg., and chlorpheniramine maleate, 4 mg.

PITMAN-MOORE Division of The Dow Chemical Company, Indianapolis DOW

NOVAHISTINE® LP

For relief of nasal congestion.



Wide-range bactericidal action for genitourinary infections

NEW OMNIPEN®

(AMPICILLIN) WYETH

A penicillin that exhibits effectiveness within the gram-positive spectrum of penicillin G* and the gram-negative spectrum of chloramphenicol and the tetracyclines.*

Active at foci of infections—kidney, ureter, bladder or urethra.

Effective against many gram-negative and gram-positive pathogens—thus may be valuable not only in genitourinary but also in common respiratory and gastrointestinal infections.

Normally produces high and persistent levels in blood and high concentrations in bile and urine.

Significant inherent stability.

**Exclusive of penicillinase-producing bacteria.*

Indications: Urinary tract infections, especially those caused by *E. coli*, *Proteus mirabilis*, and *Streptococcus faecalis* and *viridans;* respiratory infections caused by *H. influenzae*, pneumococci, streptococci, and nonpenicillinase-producing staphylococci; and gastrointestinal infections caused by *Shigella* and *Salmonella*, including *Sal. typhosa*.

Contraindications: Hypersensitivity to penicillin; infections due to penicillinase-producing staphylococci and other penicillinase-producing bacteria.

Precautions: If allergic reaction occurs, discontinue ampicillin and administer epinephrine, corticosteroids, antihistamines and/or pressor amines as indicated. Transient moderate elevation of SGOT values of undetermined significance was noted in a few infants. Liver and kidney function as well as hematopoietic tests are advisable during therapy, particularly in infants. As with other antibiotics, precautions should be taken against gastrointestinal superinfection. Safety for use in pregnancy has not been established.

Adverse Reactions: Occasional mild side effects as urticaria, skin rash, pruritus, diarrhea, nausea and vomiting. There have been no reports of blood dyscrasias, liver or kidney damage. Anaphylaxis has been reported.

Composition: Capsules, 250 mg.

American Hospital Formulary Service Category No. 8:12.16.

Wyeth Laboratories Philadelphia, Pa.

Wyeth®
SERVICE TO MEDICINE

"Yes, Doctor, the pain is gone."

■ Despite introduction of synthetic substitutes, efficacy of 'Empirin' Compound with Codeine remains unchallenged.

'Empirin'® Compound with Codeine Phosphate gr. ½ No. 3
Each tablet contains: Codeine Phosphate gr. ½ (Warning—May be habit forming), Phenacetin gr. 2½, Aspirin gr. 3½, Caffeine gr. ½.

Keeps the Promise of Pain Relief

BURROUGHS WELLCOME & CO. (U.S.A.) INC., Tuckahoe, N. Y.

List Details for New MSMS Contract For Dependent's Medical Care

The MSMS Council, at its November 9 meeting, approved the contract with the Office for Dependents' Medical Care.

Under this contract, reimbursement to Michigan physicians rendering services authorized under this program will be in conformance with the 1965 MRVS, as amended in 1966, with the $5.00 conversion factor as a basis for establishing maximum allowances.

Although some of the MRVS codes and nomenclature will not appear in the ODMC manual, physicians can still use the codes and nomenclature in the 1965 MRVS when submitting claims for services provided ODMC beneficiaries.

Effective October 1, 1966, portions of this program were expanded to authorize outpatient care benefits to eligible dependents of active duty personnel. That portion of the program pertaining to care of the handicapped, coverage for retired personnel and their dependents and extended inpatient care for dependents of active duty personnel will become effective on January 1, 1967. Directives, plans and policies to provide guidance for these particular portions of the program will be furnished MSMS shortly.

* * *

AN IMPORTANT provision of the amendment requires dependents to pay the first $50 per person, or collectively $100 per family, of outpatient charges during a single fiscal year and 20 per cent of all charges thereafter.

In satisfying the deductible, all authorized outpatient care may be included, such as physician service, ambulance service, drugs, etc. The patient or sponsor must accumulate receipts for authorized outpatient service, and, when sufficient receipts have been accumulated to satisfy the applicable deductible ($50 or $100), the dependent will be required to submit receipts equal or exceeding the deductibility to the fiscal administrator (Michigan Medical Service) as proof of having fulfilled the requirements.

Outpatient Care

Outpatient coverage authorized under terms of these amendments includes but is not limited to:

a. Treatment of: (1) Medical and surgical conditions. (2) Nervous and mental disorders. (3) Chronic conditions and diseases. (4) Contagious diseases. (5) Bodily injury.

b. Maternity and infant care when delivery is outside a hospital.

c. Diagnostic examinations, including X-ray, laboratory, basal metabolism, electrocardiogram, electroencephalogram, and radioisotope.

d. Anesthetics and their administration.

e. Oxygen and equipment for its administration.

f. Physical therapy.

g. Orthopedic braces (except orthopedic shoes), crutches.

h. Dental care required as a necessary adjunct to medical or surgical treatment.

i. Local ambulance service to or from a hospital for the purpose of receiving inpatient care or outpatient accident care.

j. Drugs and medicines.

k. Artificial limbs and artificial eyes, including initial issue and fitting, replacement, repair, and adjustment.

l. Durable equipment, such as wheelchairs, iron lungs, and hospital beds, on a rental basis.

m. Routine physical examinations and immunizations. Routine physical examinations and immunizations may be provided only when required by spouses and children who are under orders to perform travel outside the United States as a result of a member's duty assignment.

n. Professional services. The services of professional personnel are authorized in a home, office, or outpatient facilities of a hospital as follows: (1) Physician services. (2) Services of Christian Science practitioners. (3) Services of private-duty nurses when ordered by the attending physician or Christian Science practitioners. (4) Services of allied scientists when ordered by the attending physician.

* * *

UNTIL A REVISED claim form has been designed, the current DA form 1863-1 or 1863-2 will be utilized for authorized patient care.

Claims for reimbursement for authorized care were previously submitted to appropriate continental army commanders. However, effective October 1, 1966, such claims for authorized civilian care provided to eligible dependents will be submitted to the fiscal administrator, who will pay the physician's claims for the state in which the care was provided.

Please Save

MSMS members may wish to remove these four center pages and save these details about the new contract with the Office for Dependent's Medical Care.

Re-elect Robinson To Detroit Board

Remus Robinson, M.D., Detroit civic leader, was re-elected to a six-year term on the Detroit Board of Education, November 8. First elected to the Board in 1955, Dr. Robinson will begin his third term in January 1967. He is one of two members elected from four candidates for the position. In 1965, Dr. Robinson received a coveted MSMS Certificate of Commendation for his outstanding civic service, including his work as past president of the Board of Education.

More Title XIX Services Come Under Law Jan. 1

Effective January 1, 1967, physicians services in his office, patient's home or elsewhere are covered under the Title XIX medical assistance program. This program is designed to assist needy persons in paying expenses for a wide variety of medical services necessary to protect health which are recognized under state law and furnished by licensed practitioners. Coverage of physicians' services in hospitals began October 1, 1966. Prescribed drugs will also be covered effective January 1, 1967.

Pick Alcoholism Education for Special Push

MSMS, its component county medical societies and all members will be encouraged during December and January to conduct a unified alcoholism educational program.

A two-month educational effort was approved by The MSMS Council on Nov. 9 upon the recommendation of the Committee on Alcoholism and Drug Addiction.

"The Committee felt that the major goal of this program should be to convince and inform the physicians in Michigan and the public that alcoholism is a disease and can be treated," explains C. K. Stroup, M.D., of Flint, Committee chairman.

Various projects will be carried out by the Alcoholism Committee in cooperation with the Public Relations and Publication Committee.

The Alcoholism Educational Program follows the special August-September emphasis on Medicine and Football, and the October-November focus on Venereal Disease Education.

MDPAC OFFICIAL REVIEWS EFFORTS TO ELECT QUALIFIED CANDIDATES

There is no need to report the results of the Michigan election — they have made headlines throughout the nation. The reasons for the results are many, varied, and nebulous: a moderation expressed by the populous, a slowdown in the liberal social experiment, a desire to return to deliberate government — a two-party system, and so on. What ever the reasons, AMPAC-MDPAC must be counted when the accolades are bestowed, for you see, your PAC was successful in the winners column, and, I believe, was part of the reason for the candidates success.

Since it is not politically astute to reveal the amounts of the contribution nor the recipients, a generalized report to you, the members of MDPAC must be given.

* * *

YOUR PAC COMMITTEE reviewed the candidates before the primaries and participated in several primary races. Since individual PAC members are interested in party affiliation, and as the Board of MDPAC paid scant consideration to same, the ratio was two to one. Republican to Democrat. Only qualified candidates, for responsible government, sympathetic to the health needs of our state and nation met the major requirements for PAC support. 75% of the candidates we supported won their races. In terms of money expended, 93% of the money was spent on winning races.

In the general election, after many hours of deliberation and evaluation, your PAC supported Democratic (28%) and Republican (72%) candidates—good men all. 79% of these men won their races.

Doctors enlisted in many areas statewide on campaign committees, soliciting votes, writing letters, working for their candidates, giving of their time and money to the men of their choice, succeeded in promoting and winning, and yes, losing. Their effort was much appreciated by candidates and committees and most creditable to the profession they represent.

* * *

YOU HAVE TO AGREE your PAC did exceptionally well with the monies entrusted to them, but we have only made a beginning. Only 10% of MSMS doctors participated in this vital candidate support effort. We must enlist many more MD's in MDPAC to be effective. Let's roll up our sleeves and really become responsible citizens and complete physicians.

Please continue to support MDPAC and AMPAC for they deserve and need YOU.

Respectfully submitted,
V. V. Bass, MD, Saginaw
Secretary-Treasurer, MDPAC

Third Physician Elected to Board Of Wayne State

Alfred H. Sokolowski, M.D., Detroit, was elected November 8 to the eight-member Wayne State University Board of Governors, defeating incumbent Jean McKee. Dr. Sokolowski, a Republican, will serve an eight-year term, beginning January 1. A physician and surgeon, he joins two other physicians currently serving on the Board, Alfred H. Whittaker, M.D., Grosse Pointe Republican, and DeWitt T. Burton, M.D., Detroit Democrat.

Affiliated with Providence and Highland Park General Hospitals, Dr. Sokolowski was born in Detroit and received his B.S. degree with distinction from Wayne State University in 1951, his M.D. degree from the University of Michigan. His postgraduate study was in otolarngology at the University of Pittsburgh medical school, 1960.

Active in Polish-American organizations, Dr. Sokolowski is now president of the Michigan Division of the Polish-American Congress.

Leon Fill, M.D., Huntington Woods, who was elected in 1964 to the State Board of Education on the Democratic ticket, was an unsuccessful candidate for re-election.

DETROIT — John McCabe, Executive Director, Michigan Medical Service, was named as one of five Blue Shield representatives to the new eleven-member advisory group to Social Security Administration on the payment of physicians' bills under Medicare.

Considerable interest was shown by Detroit high school youths in careers in medicine at the 29th Annual Community Careers Conference sponsored Nov. 16 by the Detroit Public Schools at Wayne State University. Visiting with some of the young people are Lionel Swan, M.D., left, and Andrew Smith, M.D., both of Detroit, who led the discussion on medical careers. (MSMS Photo)

Macomb County Rechartered

A rechartering meeting of the Macomb County Medical Society was held November 15 at Mt. Clemens. Robert J. Mason, M.D., Birmingham, Chairman of The Council, gave the rechartering address praising the 63 years of service rendered by the Macomb Medical Society.

As speaker for this State Society Night of the Macomb County Society, C. Allen Payne, M.D., Grand Rapids, President of the Michigan State Medical Society, emphasized the purposes and discussed the projects of the State Society.

Doctor Mason also eulogized the service of D. Bruce Wiley, M.D., formerly of Utica, as a leader of the Macomb society and MSMS for many years. Doctor Wiley recently moved to Lansing to join the Michigan Department of Public Health.

Reregistration Time Is Now!

Every physician wishing to continue in the practice of medicine shall annually on or before January 1st reregister with the Board of Registration in Medicine on a form to be provided by the Board.

The Reregistration Form, to be signed by the applicant, shall contain his name, his residence address, the address at which he is engaged in practice, and such other identifying information as the Board may require. The annual registration fee is $5.00.

A licensee who fails to register before January 1st shall be so notified by certified mail to his last known address, and until March 1st may reregister as above provided, except that the registration fee for the year shall be $10.00.

A physician duly licensed under the Act shall be exempted from the payment of fees for any calendar year during which he is in the active service of the armed forces of the United States.

The license of a licensee who has not reregistered before March 1st shall be considered suspended until he has reregistered, at which time he may be reinstated by the Board upon the payment of a reregistration fee of $10.00; no further examination shall be required by the Board as a condition to such reinstatement.

Expand Heart Scientific Meet February 23-24

The Michigan Heart Association Scientific Sessions have been lengthened to one and one-half days for 1967. The sessions will begin at 2:00 p.m., Friday, February 24, at the Sheraton Cadillac Hotel, Detroit, and continue on Saturday.

Ross V. Taylor, M.D., Jackson, President of the Michigan Heart Association, announces the program. February 24 will begin with a symposium on "Diagnosis and Therapy of Acute Cardiovascular Conditions." The speakers will include Thomas Killip, III, M.D., Cornell University, New York City; Lewis E. January, M.D., University of Iowa, President of the American Heart Association; and Edward W. Dennis, M.D., Baylor University.

The Saturday morning meeting, February 25 will deal with "Complications of Acute Myocardial Infarction, Prevention and Treatment." The afternoon subject will be "Revascularization of the Heart." The Saturday speakers will include C. Walton Lillehei, M.D., University of Minnesota, Minneapolis; George Burch, M.D., Tulane University; and Alvin R. Feinstein, M.D., Yale University.

Students Visit U-M Medical School

Approximately 175 Michigan college students interested in medical careers examined the University of Michigan Medical School at the Medical Career Day Conference held November 11. The undergraduate students attending are already enrolled in premedical programs or hope to attend a medical school upon graduation.

"Watch for Improved Michigan Medicine in January."

That message is on the envelop which carried this issue of the MSMS journal to every member. The Publication Committee is eager to make improvements in both the content and the design.

"We want very much to make the publication even more effective for the MSMS members," explains Brooker L. Masters, M.D., Publication Committee chairman.

NATIONAL LEADERS

Betty Lou Willey, left, of Port Huron, was elected Speaker of the House of Delegates of the American Society of Medical Assistants at its recent convention; and Glen E. Millard, M.D., Detroit, was chosen as Chairman of its medical advisory board. Both have been very active in the Michigan State Medical Assistants Society.

AMA Delegates Select Leader

The MSMS Delegates to the American Medical Association elected Past President Luther R. Leader, M.D., Birmingham, as Chairman of the Delegation at its November 9 meeting.

Dr. Leader replaces George W. Slagle, M.D., Battle Creek, Chairman pro tem, following the July death of William A. Hyland, M.D., Grand Rapids, Chairman for many years.

U-M Dean Heads Association of Medical Colleges

William N. Hubbard, Jr., M.D., Ann Arbor, is the new president of the Association of American Medical Colleges, elected at the recent annual convention in San Francisco. Dean of the U-M Medical School, Doctor Hubbard succeeds T. B. Turner, M.D., the John Hopkins dean. Dr. Hubbard told a press conference that the United States is faced with a "revolution of rising expectations in medical care. The days of charity patients and double standard medicine for rich and poor are ending and the demand for doctors is increasing."

He said that medical schools which have functioned historically as research centers, are now digging into this problem with a "deep sense of responsibility for research in the organization of health care."

Turn To Page 1132
For More Breaking News

This tiny amount
of active ingredient
provides
secure
protection
against
pregnancy

Massive, worldwide clinical experience

Weight gain as infrequent as weight loss

New freedom from undesirable effects

New low cost

Contraindications—Mammary or genital carcinoma should be ruled out prior to administering Ovulen. Undiagnosed vaginal bleeding is also a contraindication to Ovulen use. A history of thrombophlebitis or pulmonary embolism, or both, is a contraindication to the use of Ovulen, unless its use is judged by the physician to be necessary despite the possible risk. Ovulen should not be used in women with suspected or overt liver dysfunction or disease. Ovulen is contraindicated in pregnant and nursing women and in patients with a history of cerebrovascular accident.

Warnings—Medication should be discontinued pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. Medication should be withdrawn if examination reveals papilledema or retinovascular lesions. Since the safety of Ovulen therapy in pregnancy has not yet been established, it is recommended that, in a patient who has missed two consecutive menstrual periods, pregnancy be ruled out before oral contraceptive therapy is continued.

Precautions—Because Ovulen may aggravate a tendency toward fluid retention in some patients, it should be administered cautiously to patients with a history of renal or cardiovascular disease (including hypertension), asthma, epilepsy or migraine. Any possible influence of long-term Ovulen therapy on pituitary, adrenal cortical, ovarian, hepatic or uterine functions requires further study. Oral contraceptives also should be administered cautiously to diabetic patients since a decrease in glucose tolerance has been observed in some patients taking these drugs. Patients on Ovulen may occasionally show abnormal glucose tolerance tests, but this does not necessarily indicate the presence of diabetes. Significant increases in platelet count, prothrombin and proconvertin tests, plasma thrombotic activity and plasma proteolytic activity have been reported.

Since estrogens may affect results of serum protein bound iodine and other thyroid function tests, these tests should not be considered definitive until Ovulen therapy has been discontinued for at least sixty days. Adrenal steroid serum levels and excretion may be affected by estrogens; the Metopirone® (SU-4885) test of pituitary-adrenal function may also be depressed. Abnormalities in hepatic function tests have also been reported, including some interference with dye excretion by the liver. This interference may give rise to Bromsulphalein® retention and jaundice in susceptible individuals. Serious liver dysfunction should be ruled out before continuing Ovulen administration when abnormalities in liver function tests occur.

Patients with a history of psychic depression should be observed carefully during treatment with oral contraceptives, and such treatment should be discontinued if depression recurs to a serious degree. Pre-existing fibroids may increase in size during Ovulen therapy. Such fibroids may regress to pretreatment size after Ovulen is stopped. In the event of breakthrough bleeding the possibility of nonfunctional causes should be borne in mind. Additional means of contraception should be used during the first seven days of Ovulen administration in the first treated cycle, because early ovulation may possibly occur.

Side Actions—The following adverse reactions have been reported with Ovulen; however, a causal relationship to Ovulen administration has not been established in all of the listed complaints: headache, dizziness, depression, breast complaints, amenorrhea, chloasma, vomiting, allergy, edema, migraine, pulmonary embolism, thrombophlebitis, visual difficulties, nervousness, rash, itching, decrease in libido, tiredness, malaise, hair loss and hair growth. A small incidence of nausea, spotting and breakthrough bleeding has been reported; these complaints tend to diminish markedly or disappear after the first cycle of treatment. Some of these side actions have required discontinuance of the drug.

Dosage—One tablet daily for 20 consecutive days beginning 5 days after the onset of menstruation.

Before prescribing see Detailed Product Information, Ovulen.

An extensive list of references on Ovulen is included in the literature mailed to physicians.

Research in the Service of Medicine
G. D. SEARLE & CO.
P. O. Box 5110, Chicago, Illinois 60680

SEARLE

Ovulen®
1 mg.

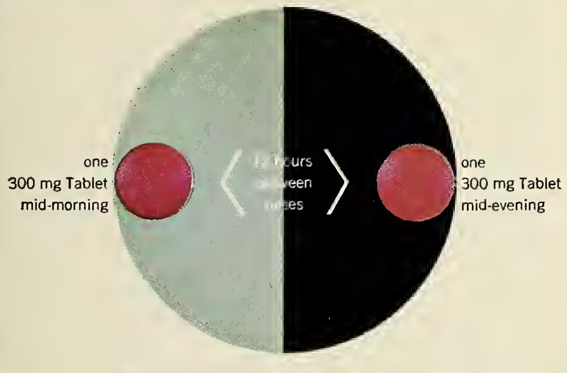
Each tablet contains:
ethynodiol diacetate 1 mg
mestranol 0.1 mg.

There is no more effective contraceptive available

why wonder about a drug when you know DECLOMYCIN®

DEMETHYLCHLORTETRACYCLINE

is effective b.i.d.



It's made for b.i.d.

Effective in a wide range of everyday infections—respiratory, urinary tract and others—in the young and aged—the acutely or chronically ill—when the offending organisms are tetracycline-sensitive.

Contraindication—History of hypersensitivity to demethylchlortetracycline.

Warning—In renal impairment, usual doses may lead to excessive systemic accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated and, if therapy is prolonged, serum level determinations may be advisable. A photodynamic reaction to natural or artificial sunlight has been observed. Small amounts of drug and short exposure may produce an exaggerated sunburn reaction which may range from erythema to severe skin manifestations. In a smaller proportion, photoallergic reactions have been reported. Patients should avoid direct exposure to sunlight and discontinue drug at the first evidence of skin discomfort.

Precautions and Side Effects—Overgrowth of nonsusceptible organisms may occur. Constant observation is essential. If new infections appear, appropriate measures should be taken. Use of demethylchlortetracycline during tooth development (last trimester of pregnancy, neonatal period and early childhood) may cause discoloration of the teeth (yellow-grey-brownish). This effect occurs mostly during long-term use but has also been observed in short treatment courses. In infants, increased intracranial pressure with bulging fontanels has been observed. All signs and symptoms have disappeared rapidly upon cessation of treatment. Side reactions include glossitis, stomatitis, proctitis, nausea, diarrhea, vaginitis and dermatitis. If adverse reaction or idiosyncrasy occurs, discontinue medication and institute appropriate therapy. Anaphylactoid reactions have been reported.

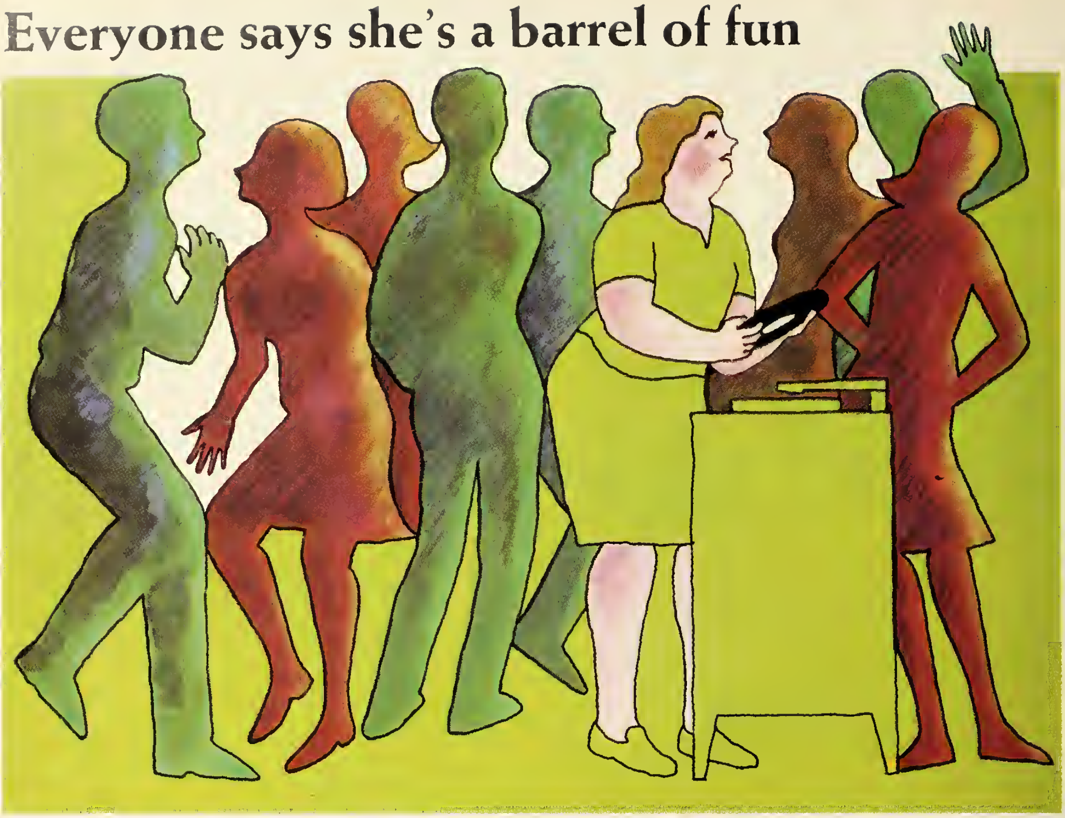
Average Adult Daily Dosage: 150 mg q.i.d. or 300 mg b.i.d. Should be given 1 hour before or 2 hours after meals, since absorption is impaired by the concomitant administration of high calcium content drugs, foods and some dairy products.

Capsules: 150 mg; *Tablets:* film coated, 300 mg, 150 mg, and 75 mg of demethylchlortetracycline HCl.

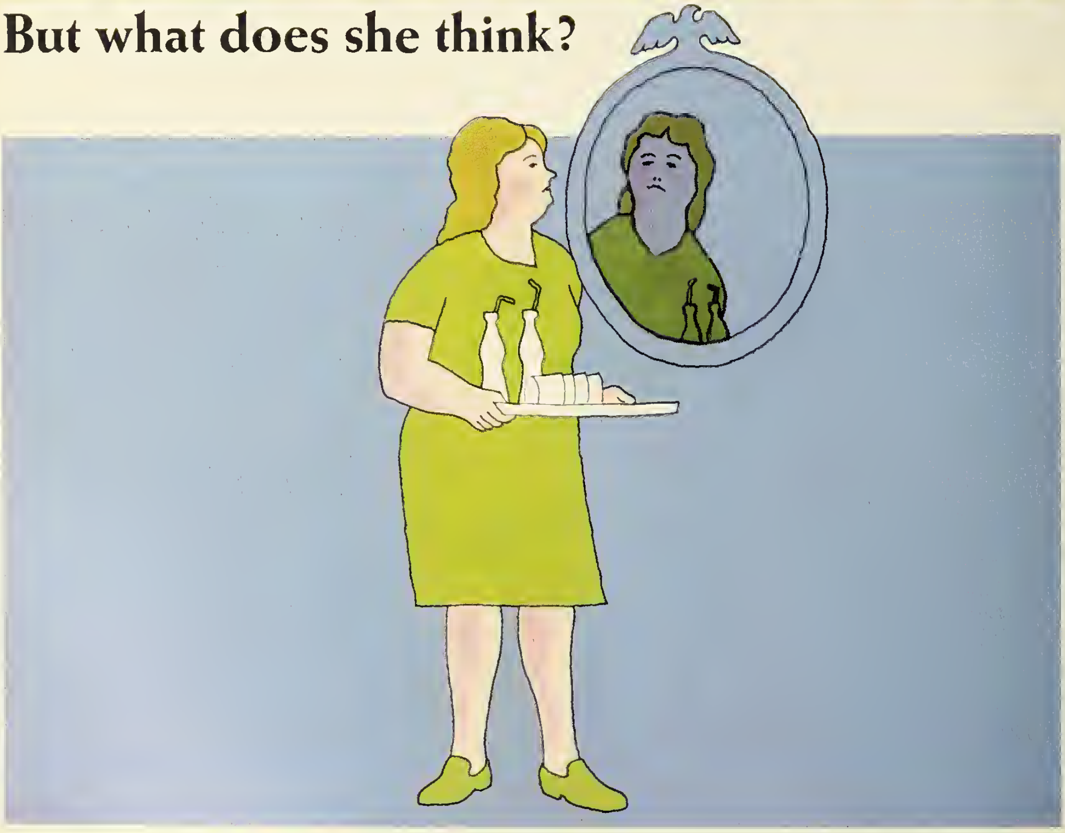
LEDERLE LABORATORIES, A Division of American Cyanamid Company, Pearl River, New York
417-6—4076

Lederle

Everyone says she's a barrel of fun



But what does she think?



Many overweight patients can benefit from the appetite control provided by the sustained anorexigenic-tranquilizing action of BAMADEX SEQUELS: anorexigenic action of amphetamine; tranquilizing action of meprobamate; prolonged action through sustained release of active ingredients.

Bamadex® Sequels®

DEXTRO-AMPHETAMINE SULFATE (15 mg.) WITH MEPROBAMATE (300 mg.) SUSTAINED RELEASE CAPSULES

to help establish a new dietary pattern

Contraindications: Dextro-amphetamine sulfate: in hyperexcitability and in agitated prepsychotic states. Previous allergic or idiosyncratic reactions to meprobamate.

Precautions: Use with caution in patients hypersensitive to sympathomimetic compounds, who have coronary or cardiovascular disease, or are severely hypertensive.

Dextro-amphetamine sulfate: Excessive use by unstable individuals may result in psychological dependence.

Meprobamate: Careful supervision of dose and amounts prescribed is advised, especially for patients with known propensity for taking excessive quantities of drugs. Excessive and prolonged use in susceptible persons, e.g. alcoholics, former addicts, and other severe psychoneurotics, has been reported to result in dependence on the drug. Where excessive dosage has continued for weeks or months, reduce dosage gradually. Sudden withdrawal may precipitate recurrence of preexisting symptoms such as anxiety, anorexia, or insomnia; or withdrawal reactions such as vomiting, ataxia, tremors, muscle twitching and, rarely, epileptiform seizures. Should meprobamate cause drowsiness or visual disturbances, reduce dosage and avoid operation of motor vehicles, machinery or other activity requiring alertness. Effects of excessive alcohol consumption may be increased by meprobamate. Appropriate caution is recommended with patients prone to excessive drinking. In patients prone to both petit and grand mal epilepsy meprobamate may precipitate grand mal attacks. Prescribe cautiously and in small quantities to patients with suicidal tendencies.

Side Effects: Overstimulation of the central nervous system, jitteriness and insomnia or drowsiness.

Dextro-amphetamine sulfate: Insomnia, excitability, and increased motor activity are common and ordinarily mild side effects. Confusion, anxiety, aggressiveness, increased libido, and hallucinations have also been observed, especially in mentally ill patients. Rebound fatigue and depression may follow central stimulation. Other effects may include dry mouth, anorexia, nausea, vomiting, diarrhea, and increased cardiovascular reactivity.

Meprobamate: Drowsiness may occur and can be associated with ataxia; the symptom can usually be controlled by decreasing the dose, or by concomitant administration of central stimulants. Allergic or idiosyncratic reactions: maculapapular rash, acute nonthrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever, transient leukopenia. A case of fatal bullous dermatitis, following administration of meprobamate and prednisolone, has been reported. Hypersensitivity has produced fever, fainting spells, angioneurotic edema, bronchial spasms, hypotensive crises (1 fatal case), anuria, stomatitis, proctitis (1 case), anaphylaxis, agranulocytosis and thrombocytopenic purpura, and a fatal instance of aplastic anemia, but only when other drugs known to elicit these conditions were given concomitantly. Fast EEG activity, usually after excessive dosage. Impairment of visual accommodation. Massive overdosage may produce drowsiness lethargy, stupor, ataxia, coma, shock, vasomotor and respiratory collapse.

Lederle

LEDERLE LABORATORIES
A Division of American Cyanamid Company,
Pearl River, New York

695-6

Commentary on Tests Of Thyroid Function

Thyroid hormone is still one of the most abused preparations in the physician's armamentarium.

It is used in a large number of disorders for which it has no specific purpose. Until the advent of the steroids, it was used as a type of "last resort drug" more commonly than any other. When everything else failed, thyroid was always a possibility. That unenviable position has now been taken over by the steroid preparations.

Fortunately for many patients, thyroid does relatively little harm when it is given in moderate doses. Because it is a glandular preparation and because it is relatively inexpensive, it is very appealing to the average lay person and to the less ethical of our colleagues in the healing arts.

To this writer the most exasperating feature is the fact that this drug is still used very much upon an empiric basis in spite of the fact that we do have very excellent and adequate tests to determine thyroid function. If we had equally good tests to determine the function of other organs of the body, the practice of medicine would be far simpler than it is.

* * *

THE PROTEIN BOUND iodine determination is still the backbone of all tests of thyroid function. It is the most reliable under usual conditions of all the tests that are available to us.

The recent ingestion of iodine in medication, such as cough syrups, or the deposition of radio-opaque materials that contain iodine, such as in cholecystorrhaphy, will result in false high values. However, these situations are usually easily identified by adequate history. Large doses of salicylates and a few other drugs may also have some effect upon the value of the protein bound iodine.

The use of radioactive iodine uptake by the thyroid gland should largely be delegated to the role of the research investigator. It certainly is not as reliable a test as the protein bound iodine. It does add, even though only a slight amount, to the exposure of the body to radiation. Particularly in the case of children, none of us know what the final total exposure will be and therefore it does seem that it is best avoided.

* * *

THE VALUES of thyroxin iodine by chromatography, free thyroxin, the thyroxin binding globulin fraction of serum (the T3 test) are all valuable tests but require more elaborate laboratory equipment and more sophisticated personnel than is readily available in the average hospital.

It should be pointed out that even the protein bound iodine determination is not a simple one and many mistakes can be made. The author recently saw a patient who had been treated for twelve months with thyroid extract when a diagnosis of hypothyroidism was suspected on the basis of a low P.B.I. Actually the patient was euthyroid and only when the test was repeated in a more reliable laboratory, after withholding therapy, was the mistake brought to the surface.

Tests for thyroid function such as the BMR, serum cholesterol and the Achilles tendon jerk are less reliable than most of the tests listed above. Also the determination of a BMR in an uncooperative or very small patient is very difficult. The same might be said of the Achilles tendon reflex. Another parameter that can be used to indicate at least the possibility of thyroid dsyfunction is the height.

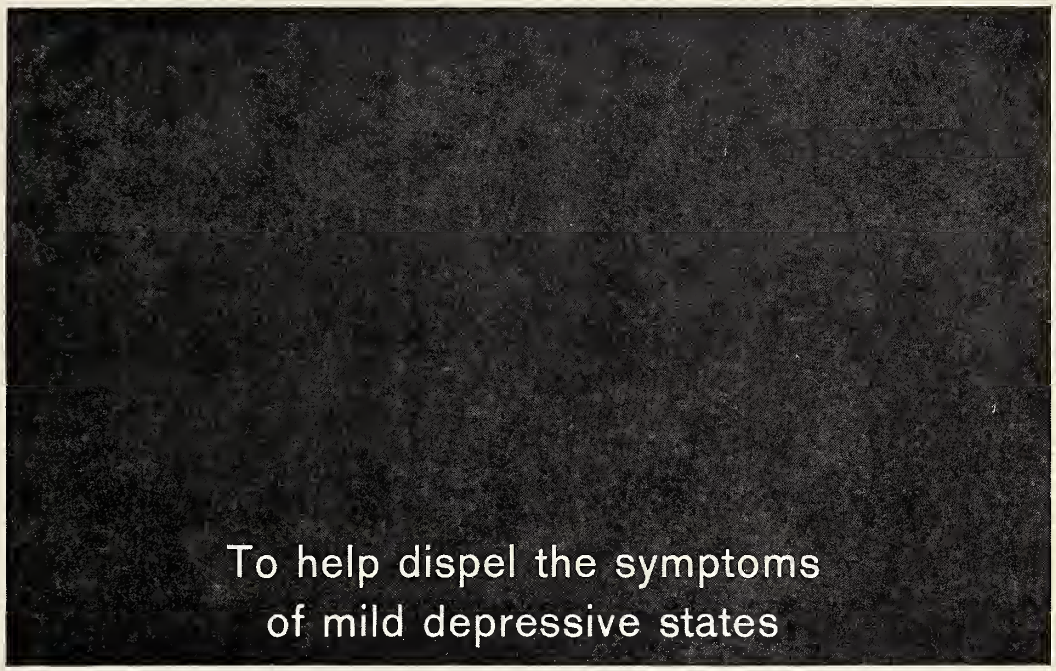
In a child this is always below normal if hypothyroidism has existed for any period of time. In children, the measure of bone maturation through X-ray examination also has value; however, that delay in maturation can be due to many causes, only one of which is decreased thyroid function.

Therapeutic trial of thyroid should be discouraged. With today's techniques in measuring thyroid function, there is little indication for this approach to the problem. The entity of "hypometabolism" with normal thyroid function tests remains a myth.

Finally, this writer would strongly condemn the indiscriminate use of thyroid for all the many ills of man for which it has been used in the past. Particularly distressing is the frequent use of this for the mentally retarded youngster. Often some degree of false hope is instilled in parents only to have this dissipated in an even greater gloom than was present before. Perhaps one of the greatest abuses of the drug is in the treatment of obesity. Here again, it usually leads to no effect whatsoever or to increased nervousness or even greater increase in the appetite.

In conclusion, we would like to point out that there are good and very adequate tests for thyroid function and that this potent and extremely useful substance should be used only when there is adequate indication for it.

—George H. Lowrey, M.D.
Scientific Editor



CONSIDER **DEXAMYL®** FIRST
brand of dextroamphetamine sulfate and amobarbital

Often within the hour, 'Dexamyl' works to help dispel such symptoms as apathy, pessimism, loss of interest and initiative, and lack of ability to concentrate.

Formulas: Each 'Dexamyl' Spansule® capsule (brand of sustained release capsule) No. 1 contains 10 mg. of Dexedrine® (brand of dextroamphetamine sulfate) and 1 gr. of amobarbital, derivative of barbituric acid [Warning, may be habit forming]. Each 'Dexamyl' *Spansule* capsule No. 2 contains 15 mg. of Dexedrine (brand of dextroamphetamine sulfate) and 1½ gr. of amobarbital [Warning, may be habit forming].
The following is a brief precautionary statement. Before prescribing, the physician should be familiar with the complete prescribing information in SK&F literature or *PDR.*
Precautions: Use with caution in patients hypersensitive to sympathomimetics or barbiturates and in coronary or cardiovascular disease or severe hypertension. Do not use in patients taking MAO inhibitors. Excessive use of the amphetamines by unstable individuals may result in a psychological dependence; in these instances, withdraw the medication. Use cautiously in pregnant patients, especially in the first trimester. *Side effects:* Insomnia, excitability and increased motor activity are infrequent and ordinarily mild.

SK&F SMITH KLINE & FRENCH LABORATORIES

Maternal Welfare Conference Slated For March 15-61

All interested MSMS members are invited to join national and local experts for the 1967 Maternal and Perinatal Welfare Conference at the Durant Hotel in Flint on March 15-16.

The outstate speakers at the conference, sponsored annually by the Michigan State Medical Society's Maternal Health Committee with the support and cooperation of the Trustees of the Clara Elizabeth Fund of Flint, will be S. Leon Israel, M.D., of Philadelphia, Warren E. Wheeler, M.D., of Lexington, and Philip R. Dodge, M.D., of Boston.

The conference will begin at 1:15 P.M., Wednesday, March 15, and will continue through the morning of March 16. Wednesday evening there will be a banquet.

Further details will be published in Michigan Medicine.

Anti-Smoking Plea Gets PTA Support

The Michigan Health Council has obtained the cooperation of the Michigan Congress of Parents and Teachers (PTA) in an anti-smoking educational effort.

The PTA units will seek to keep 7th and 8th graders from starting to smoke.

H. Carl Smith, formerly program director for the Indiana Heart Association, has been named director of the National PTA no-smoking project. The U. S. Public Health Service is supporting the project in its first year.

Key persons in the project will be PTA room mothers, who will coordinate school and home-activities, involving parents, teachers, and the children themselves. They will emphasize for young teen-agers the benefits of not smoking and the hazards, especially, of cigaret smoking.

Every day more than 4,000 young people try smoking for the first time, and U. S. Public Health Service findings indicate that half of the nation's teen-agers are regular smokers by the age of 18.

The Michigan project will be directed by Mrs. Charles Palmer, state PTA health chairman, and Ben Yep, Michigan Health Council.

Mediscene

Dec. 8 — Grand Rounds Day, St. Mary's Hospital, Grand Rapids

Jan. 17-Mar. 17; Oct. 9-13 — Hospital Food Service Supervisors, Kellogg Center, Michigan State University, East Lansing

Jan. 18-20 — Michigan Institute on Smoking and Health, Kellogg Center, Michigan State University, East Lansing

Jan. 25 — Annual Thyroid Workshop, Wayne State University School of Medicine, Detroit

Feb. 14 — Galens Honorary Medical Society Lectureship, University of Michigan, Ann Arbor

Feb. 24-25 — Heart Days Public Heart Forum, Michigan Heart Association, Sheraton Cadillac Hotel, Detroit

Mar. 15-16 — Annual Michigan Conference on Maternal and Perinatal Welfare, Pick-Durant Hotel, Flint

Apr. 3 — Beaumont Lecture, Wayne County Medical Society Building, Detroit

Apr. 6 — Annual Membership Conference, Michigan League for Nursing, Kellogg Center, Michigan State University, East Lansing.

Apr. 28-30 — Annual Congress of the Professions, Statler-Hilton Hotel, Detroit

May 17-19 — Michigan Public Health Association Conference, Pantlind Hotel, Grand Rapids

June 18-22 — AMA Annual Convention, Jersey City, New Jersey

Morning clinics were held at each of the three Grand Rapids hospitals during the 1966 MSMS Annual Session. Robert Marshall, M.D., radiologist from Butterworth Hospital in Grand Rapids, addresses the physicians at the Butterworth clinic.

SQUIBB NOTES ON THERAPY

MOLECULAR REMODELING—

laboratory exercise or clinical necessity?

More than twenty-five years have passed since the discovery of the diuretic activity of sulfanilamide started pharmacologists on a succession of molecular remodelings to find the ideal diuretic.

Diuresis—a sought-after clinical effect from an unwanted side effect

It started in 1937 when a clinician reported that the administration of a sulfonamide was sometimes accompanied by an unexplainable side effect—metabolic acidosis.[1] Three years later the side effect was explained. The sulfonamide radical of sulfanilamide inhibited carbonic anhydrase,[2] the enzyme responsible for converting carbon dioxide and water to hydrogen ions and bicarbonate ions.

Later, other investigators showed by dog experiments that metabolic acidosis probably resulted when the inhibition of carbonic anhydrase upset the exchange of hydrogen and sodium ions, causing increased excretion of sodium as the bicarbonate.[3]

It was twelve long years after the first report of the unexplainable side effect (metabolic acidosis) that it was finally shown that large doses of sulfanilamide administered to edematous patients were indeed capable of promoting diuresis.[4] However, the possibility of toxic effects from its prolonged use and its relatively weak diuretic action made it impractical for clinical use as a diuretic.[5]

Because the inhibition of carbonic anhydrase seemed to be the key to effective diuresis, investigators began to look for more potent enzyme inhibitors —in the hopes that they would be more effective diuretics.

The most important of these early compounds, acetazolamide, enjoyed several years of fairly wide clinical use.

Its carbonic anhydrase inhibitory activity was several hundred times greater than that of sulfanilamide.[6] The increase in inhibitory activity, however, increased not only the excretion of sodium and bicarbonate ions, but also the excretion of potassium.[7] And, like its predecessor, acetazolamide precipitated mild acidosis. Its prolonged use could result in hypokalemic acidosis.[7]

The 'thiazides'—an answer to the metabolic acidosis caused by carbonic anhydrase inhibition

Despite the fact that the sulfonamide group appeared to be responsible for carbonic anhydrase inhibition which in turn appeared to be responsible for diuresis, investigators began to synthesize compounds with structural alterations to the sulfonamide group.

The first major breakthrough came with the synthesis of chlorothiazide. Altering the sulfonamide group did indeed alter the ability of chlorothiazide to inhibit carbonic anhydrase—it was only 1/10th as potent as acetazolamide in inhibiting the enzyme.[8] Despite the drop in inhibitory potency, however, chlorothiazide proved to be an effective diuretic—an observation that led to the conclusion that its diuretic action was due to some mechanism other than its action on carbonic anhydrase.[9, 10]

For effective diuresis, chlorothiazide was administered in daily dosages ranging from 250 to 2000 mg.[11] It increased the excretion of sodium and chloride; and, to a lesser extent, potassium and bicarbonate.[11] The excretion of potassium appeared to be maximal at higher dose levels at which, theoretically, the carbonic anhydrase inhibitory effect is more active.[11] Its prolonged use, therefore, could sometimes result in metabolic hypokalemic, hypochloremic alkalosis.[7]

Naturetin—effective diuresis with more favorable electrolyte balance

Other thiazides followed—with improvements being aimed at two particular areas: 1. attempts to increase diuretic action in relation to the milligram potency of the drug, and 2. attempts at a more favorable sodium/potassium ratio in the urine, i.e., to decrease the excretion of potassium while maintaining the excretion of sodium.[12]

One of these, Naturetin, Squibb Bendroflumethiazide, has made advances on both these points. "By adding a 3-benzyl radical to hydroflumethiazide a rather dramatic reduction in dose range is accomplished. With this drug, effective sodium excretion is obtained with doses between 2.5 and 10 mg., which is a 200 to 1 ratio as compared to chlorothiazide..."[13]

Moreover, due probably to its virtual lack of carbonic anhydrase inhibition, Naturetin (bendroflumethiazide) has been shown to cause less potassium and bicarbonate loss and less alteration in urinary pH than either chlorothiazide or hydrochlorothiazide.

Naturetin is outstandingly effective not only in establishing, but also in maintaining, excretion of retained fluid in edematous patients. And its duration of action is sufficiently prolonged to allow a single daily administration in most patients. Naturetin is also an effective antihypertensive agent.

Contraindications: Severe renal impairment; previous hypersensitivity.

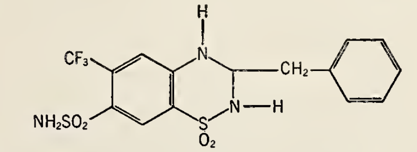
Warning: Ulcerative small bowel lesions have occurred with potassium-containing thiazide preparations or with enteric-coated potassium salts supplementally. Stop medication if abdominal pain, distension, nausea, vomiting, or G.I. bleeding occur.

Precautions: The dosage of ganglionic blocking agents, veratrum, or hydralazine when used concomitantly must be reduced by at least 50% to avoid orthostatic hypotension. Electrolyte disturbances are possible in cirrhotic or digitalized patients.

Side Effects: Bendroflumethiazide may cause increases in serum uric acid, unmask diabetes, increase glycemia and glycosuria in diabetic patients and may cause hypochloremic alkalosis, hypokalemia; cramps, pruritus, paresthesias, and rashes may occur.

Supplied: Naturetin (Squibb Bendroflumethiazide) 5 mg. and 2.5 mg. tablets. Also available Naturetin c̄ K [Squibb Bendroflumethiazide (5 or 2.5 mg.) with Potassium Chloride (500 mg.)]. For full information, see Product Brief.

References: 1. Southworth, H.: Proc. Soc. Exper. Biol. & Med. *36*:58, 1937. **2.** Mann, T. and Keilin, D.: Nature *146*:164, 1940. **3.** Pitts, R. F., and Alexander, R. S.: Am. J. Physiol. *144*:239, 1945. **4.** Schwartz, W. B.: New England J. Med. *240*:173, 1949. **5.** Friedberg, C. K., in Moyer, J. H., and Fuchs, M.: Edema Mechanisms and Management, Philadelphia, W. B. Saunders Co., 1960, p. 259. **6.** Cumming, J. R.; Tabachnick, E., and Seelig, M., in Moyer, J. H., and Fuchs, M.: op. cit., p. 254. **7.** Werko, L., in Moyer, J. H., and Fuchs, M.: op. cit., p. 188. **8.** Beyer, K. H., Jr., in Moyer, J. H., and Fuchs, M.: op. cit., p. 274. **9.** Maren, T. H., and Wiley, C. E.: J. Pharmacol. & Exper. Therap. *143*:230, 1964. **10.** Earley, L. E., and Orloff, J.: Ann. Rev. Med. *15*:149, 1964. **11.** Fuchs, M., and Mallin, S. R., in Moyer, J. H., and Fuchs, M.: op. cit., p. 276. **12.** Ford, R. V., in Moyer, J. H., and Fuchs, M.: op. cit., p. 290. **13.** cited in Fuchs, M., and Mallin, S. R. (ref. 11): op. cit., p. 283.



Naturetin®

SQUIBB BENDROFLUMETHIAZIDE

to reduce excess fluid
or high blood pressure

SQUIBB 'The Priceless Ingredient' of every product is the honor and integrity of its maker.

The Mediatric Age:

There is a growing senescent body of people on their way to malignant inactivity, who sorely need your interest and direction to help them back to a more active and useful life. There are medicines too, designed to help. One such has proved useful in clinical practice.

"A steroid-nutritional compound (Mediatric) was used in 100 patients to relieve some of the symptoms caused by degenerative changes of aging . . . This therapy resulted in improvement of 75 per cent of the patients . . ."

McNeill, A. J.: Clin. Med. *8*:518 (Mar.) 1961.

"Mediatric (steroid-nutritional compound) capsules, one a day, seem to give definite help to debilitated patients."

Arnold, E. T., Jr.: Geriatrics *12*:612 (Oct.) 1957.

"Nutritional and hormone bolstering of function in the aged may have a useful place in geriatrics."

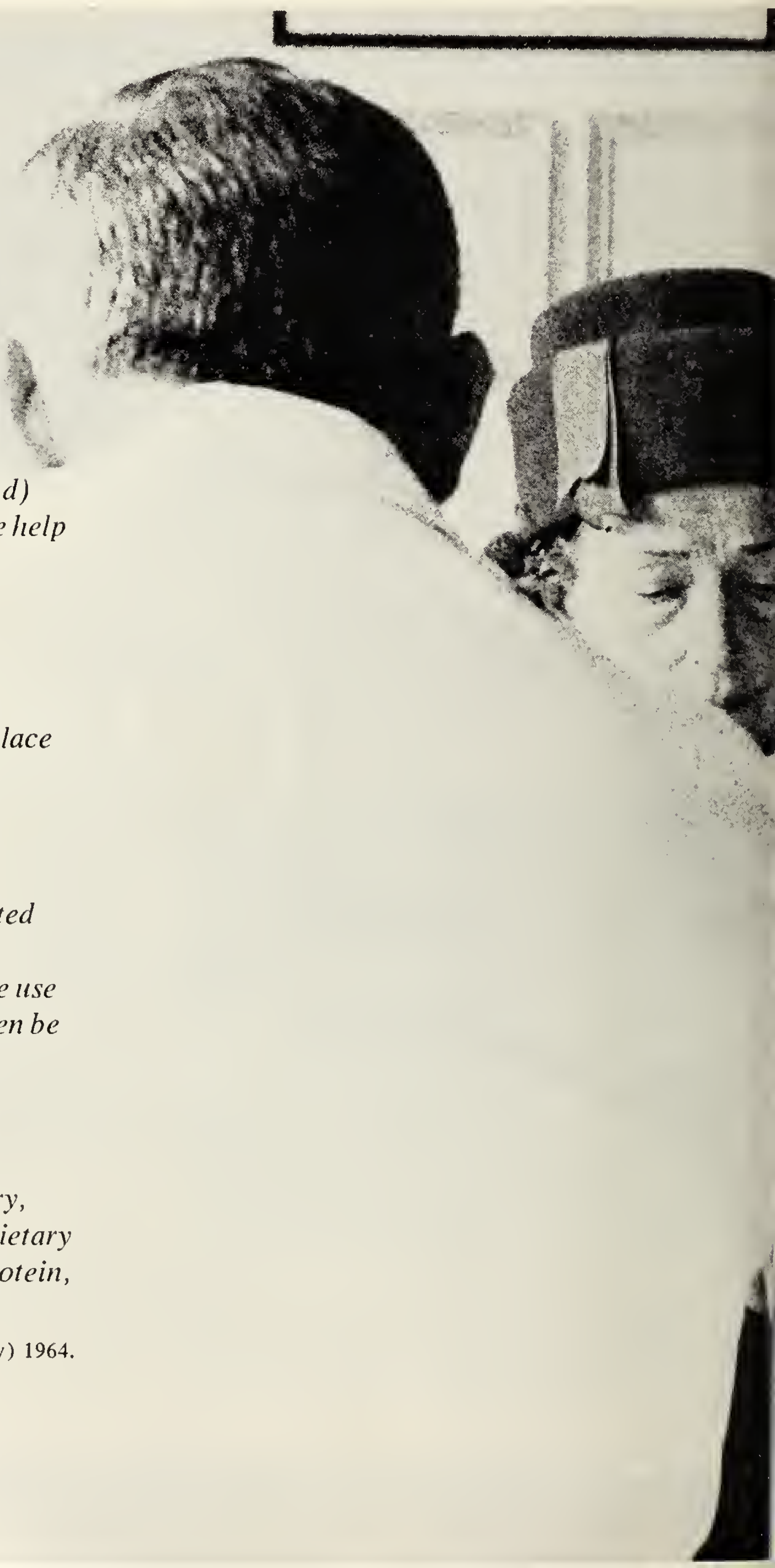
Morgan, A. F.: Gerontologist 2:77 (June) 1962.

"In diets which for any reason are restricted in calories, enough of these substances (B vitamins) may not be supplied . . . The use of B and C vitamin supplements may then be justified and indeed may be necessary."

Morgan, A. F.: Gerontologist 2:77 (June) 1962.

"Intensive nutritional therapy is necessary, especially in elderly people, to correct dietary deficiencies created by large losses of protein, vitamins and other nutrients."

Riccitelli, M. L.: J. Am. Geriatrics Soc. *12*:489 (May) 1964.



Mediatric®

Designed for the "metabolically spent"

Nutritional reinforcement for those who can't —or won't—eat properly...balanced amounts of estrogen and androgen to counteract declining gonadal hormone secretion and its sequelae of premature degenerative changes...mild antidepressant for a gentle "mood" uplift...

The estrogen component in MEDIATRIC is PREMARIN® (conjugated estrogens—equine), the natural estrogen most widely prescribed for its superior physiologic and metabolic benefits.

MEDIATRIC also provides *nutritional reinforcement—blood-building factors and vitamin supplementation.* It contributes a *gentle "mood" uplift* through methamphetamine HCl.

Three different dosage forms—Liquid, Tablets, and Capsules—offer convenience and variety.

MEDIATRIC Liquid

Each 15 cc. (3 teaspoonfuls) contains:

*Conjugated estrogens—equine (Premarin®)	0.25 mg.
Methyltestosterone	2.5 mg.
Thiamine HCl	5.0 mg.
Cyanocobalamin	1.5 mcg.
Methamphetamine HCl	1.0 mg.

Contains 15% alcohol

MEDIATRIC Tablets and Capsules

Each MEDIATRIC Tablet or Capsule contains:

*Conjugated estrogens—equine (Premarin®)	0.25 mg.
Methyltestosterone	2.5 mg.
Ascorbic acid	100.0 mg.
Cyanocobalamin	2.5 mcg.
Intrinsic factor concentrate	8.0 mg.
Thiamine mononitrate	10.0 mg.
Riboflavin	5.0 mg.
Niacinamide	50.0 mg.
Pyridoxine HCl	3.0 mg.
Calc. pantothenate	20.0 mg.
Ferrous sulfate exsic.	30.0 mg.
Methamphetamine HCl	1.0 mg.

*Orally active, water-soluble conjugated estrogens derived from pregnant mares' urine and standardized in terms of the weight of active, water-soluble estrogen content.

MEDIATRIC helps keep the older patient alert and active; helps relieve general malaise, easy fatigability, vague pains in the bones and joints, loss of appetite, and lack of interest usually associated with declining gonadal hormone secretion.

CONTRAINDICATION: Carcinoma of the prostate, due to methyltestosterone component.

WARNING: Some patients with pernicious anemia may not respond to treatment with the Tablets or Capsules, nor is cessation of response predictable. Periodic examinations and laboratory studies of pernicious anemia patients are essential and recommended.

SIDE EFFECTS: In addition to withdrawal bleeding, breast tenderness or hirsutism may occur.

SUGGESTED DOSAGES: *Male and female:* 3 teaspoonfuls of Liquid, 1 Tablet, or 1 Capsule, daily or as required.

In the female: To avoid continuous stimulation of breast and uterus, cyclic therapy is recommended (3 week regimen with 1 week rest period—Withdrawal bleeding may occur during this 1 week rest period).

In the male: A careful check should be made on the status of the prostate gland when therapy is given for protracted intervals.

SUPPLIED: No. 910 — MEDIATRIC Liquid, in bottles of 16 fluidounces and 1 gallon. No. 752 — MEDIATRIC Tablets, in bottles of 100 and 1,000. No. 252 — MEDIATRIC Capsules, in bottles of 30, 100, and 1,000.

MEDIATRIC
TABLETS
No. 910
MEDIATRIC
LIQUID
SHAKE WELL BEFORE USING

Mediatric®

steroid-nutritional compound

AYERST LABORATORIES, NEW YORK, N.Y. 10017 • Montreal, Canada

6636

Say you saw it in Michigan Medicine

Seated in the back two rows of the 1966 MSMS House of Delegates were the representatives from the senior medical classes at Wayne State University and the University of Michigan. The young men enjoyed the opportunity to listen to the delegates debate, to attend reference committees, and to study all the other aspects of the MSMS House.

MSMS, PTA Working To Tell VD Facts

Opportunities for physicians and PTA members to work together to conduct VD educational activities are unlimited in Michigan.

Leaders of both the Michigan State Medical Society and the Congress of Parents and Teachers are eager to serve the children and young people of the state.

MSMS officials have been in close touch with PTA officials to explore ways to interest students, teachers and parents to check the spread of VD.

Michigan PTA members have been challenged by the National Congress "to lend their active support in every way."

MSMS members are urged to assist the 350,000 Michigan PTA members to provide VD programs at their meetings and to help conduct VD assemblies in the schools.

The resolution adopted by the national PTA, in part, states,

"Resolved, That the National Congress of Parents and Teachers go on record as endorsing the introduction of a sound and adequate program of venereal disease education into every school system in the United States, beginning at least by the eighth grade; and be it further

"Resolved, That the National Congress of Parents and Teachers recognize officially that no dread, crippling, incapacitating disease has any place or purpose in a civilized society, and be it further

"Resolved, That the National Congress of Parents and Teachers urge parents, youth leaders, educators, and all other responsible citizens to lend their active support in every way possible to the eradication of syphilis from the United States by 1972, and to the control and eventual eradication of gonorrhea as well; and be it further

"Resolved, That the National Congress of Parents and Teachers call upon the President of the United States and the members of the Congress of the United States to lend the prestige and power of their high offices to the accomplishment of these important goals."

Urge Doctors Help Basketball Teams

Many physicians and MSMS county medical societies increased their concern this past fall for high school football players.

Now it's time, says the MSMS Committee on the Medical Aspects of Organized Athletics, to be sure the basketball health program also is well organized and administered.

The MSMS Committee stresses several points often repeated by the AMA re sports:

The Committee on the Medical Aspects of Sports of the American Medical Association has delineated five areas worthy of special attention.

These points of emphasis originally set forth as vital factors in protecting the health of the high school athlete have equal application for fitness promotion. Included are: proper conditioning, careful coaching, good officiating, the right equipment and facilities, and adequate medical care. The latter involves: (a) a thorough preseason health history and medical examination; (b) a physician present at contests and readily available during practice sessions; and (c) authority from the physician before an injured player returns to play.

brings peace to the hyperactive colon

CANTIL®
(mepenzolate bromide)

helps restore normal motility and tone

"In 40 of 44 cases of irritable or spastic colon, Cantil [mepenzolate bromide] or Cantil with Phenobarbital reduced or abolished abdominal pain, diarrhea and distention and promoted restoration of normal bowel function . . . Cantil [mepenzolate bromide] proved to be singularly free of anticholinergic side-effects . . . Urinary retention, noted in two cases was eliminated in one by reducing dosage."[1]

IN BRIEF: One or two tablets three times a day and one or two at bedtime usually provide prompt relief. Cantil with Phenobarbital may be prescribed if sedation is required.

Dryness of the mouth or blurring of vision may occur but it is usually mild and transitory. Urinary retention is rare. Caution should be observed in prostatic hypertrophy—withhold in glaucoma. Cantil with Phenobarbital is contraindicated in patients sensitive to phenobarbital.

Supplied: CANTIL (mepenzolate bromide)—25 mg. per scored tablet. Bottles of 100 and 250. CANTIL with PHENOBARBITAL—containing in each scored tablet 16 mg. phenobarbital (warning: may be habit forming) and 25 mg. mepenzolate bromide. Bottles of 100 and 250.

[1] Riese, J. A.: Amer. J. Gastroent. 28:541 (Nov.) 1957

LAKESIDE LABORATORIES, INC. Milwaukee, Wisconsin 53201

LAKESIDE

PRODUCTS
FOR PATIENTS
YOU SEE
EVERY DAY

Many Physicians Among TB Association Leaders

Michigan physicians are well represented among the new officers of the Michigan Tuberculosis and Respiratory Disease Association. Elected 1st vice president was Winthrop M. Davey, M.D., Ann Arbor.

Seven physicians were elected representative trustees of the Association. They are Paul T. Chapman, M.D., Detroit; E. Osborn Coates, M.D., Detroit; McClellan B. Conover, M.D., Flint; Winthrop N. Davey, M.D., Ann Arbor; Everett Gaikema, M.D., Muskegon; Oscar D. Stryker, M.D., Mt. Clemens; and Chester S. Koop, M.D., Flint.

Trustees at large for the coming year are Ezra V. Bridge, M.D., Port Huron; B. P. Brown, M.D., Charlotte; Howard R. Eddy, M.D., Adrian; Louis Hayes, M.D., Gaylord; Richard L. Jankowska, M.D., Bay City; Walter A. Meier, M.D., Monroe; James M. Sanderson, M.D., Cadillac; Irwin C. Sweet, M.D., Gladwin; James R. Acocks, M.D., Marquette; and Winona Barrows, M.D., Kalamazoo.

John L. Isbister, M.D., Lansing, is the representative to the Association for the Michigan Thoracic Society.

Walt New Chairman Of Surgery at WSU

Alexander Walt, M.D., is the new professor and Chairman of the Department of General Surgery at the WSU School of Medicine, approved recently by the Board of Governors of Wayne State University.

Dr. Walt, who is also Assistant Dean of Medicine, is on the staffs of Detroit General Hospital, Harper Hospital, Hutzel Hospital (formerly Woman's) and is a consultant to the Veterans Administration in Dearborn.

A graduate of the Medical School of the University of Cape Town in South Africa, Dr. Walt did postgraduate work at Guy's Hospital, London, and at the Mayo Clinic. He holds a Master of Science degree from the University of Minnesota.

Dr. Walt joined the WSU School of Medicine in 1961.

Nesbit, President-Elect Of College of Surgeons

Reed M. Nesbit, M.D., Ann Arbor, was voted President-Elect of the American College of Surgeons at its annual meeting in San Francisco.

Doctor Nesbit, professor of surgery and head of the genito-urinary section of the department of surgery at the University of Michigan School of Medicine, will take office at the ACS clinical congress in Chicago next fall.

A former member of the ACS Board of Regents, Doctor Nesbit in 1964 served as the first ACS Vice-President.

Mainwaring Soon to Lead Clinical Pathologists

Rosser L. Mainwaring, M.D., Dearborn, an associate professor of pathology at Wayne State University School of Medicine, has been named president-elect of the American Society of Clinical Pathologists.

Dr. Mainwaring, a pathologist and director of laboratories at the Oakwood Hospital, Dearborn, will take office next year.

In the past Dr. Mainwaring has served as president of the American Association of Blood Banks and as president of the Michigan Society of Pathologists. In addition he has been councilor of the Michigan Society of Pathologists to the American Society of Clinical Pathologists.

Utilities Executive Heads Planning Council

Anson Hedgecock, vice president of Consumers Power Company, Jackson, has been elected chairman of the Michigan Health Facilities Planning Council. Hedgecock succeeds Harry R. Hall, president of the Michigan State Chamber of Commerce, who will continue as a Council member. Also elected as Council members were: Russell Jones, Grand Rapids, 1st vice chairman; D. Bonta Hiscoe, M.D., Lansing, 2nd vice chairman; A. Kent Schafer, Traverse City, treasurer; and Robert F. Smith, Lansing, secretary.

State Cancer Society Elects MD Chairmen

Two Michigan physicians have been elected officers of the Michigan Division of the American Cancer Society. Roscoe V. Stuber, M.D., Howell, is the new medical chairman of the Michigan Division of the Society, and Roscoe J. Fortner, M.D., Three Rivers, is the new vice medical chairman. Both were installed during the annual meeting of the board of directors in Lansing.

IT'S AS PLAIN AS THE NOSE ON HIS FACE.

UP TO 10–12 HOURS' CLEAR BREATHING ON ONE TABLET

Dimetapp® Extentabs®

(Dimetane® [brompheniramine maleate], 12 mg.; phenylephrine HCl, 15 mg.; phenylpropanolamine HCl, 15 mg.)

In sinusitis, colds, or U.R.I., Dimetapp lets congested patients breathe easy again. Each Extentab brings welcome relief all day or all night, usually without drowsiness or overstimulation. Its key to success? The Dimetapp formula—Dimetane (brompheniramine maleate), a potent antihistamine reported in one study to have elicited side effects as few as the placebo,* teamed with decongestants phenylephrine and phenylpropanolamine—in a dependable 10- to 12-hour form.

Contraindications: Patients hypersensitive to antihistamines. Not recommended for use during pregnancy.

Precautions: Until the patient's response has been determined, he should be cautioned against engaging in operations requiring alertness. Administer with care to patients with cardiac or peripheral vascular diseases or hypertension.

Side Effects: Hypersensitivity reactions including skin rashes, urticaria, hypotension and thrombocytopenia have been reported on rare occasions. Drowsiness, lassitude, nausea, giddiness, dryness of the mouth, mydriasis, increased irritability, or excitement may be encountered.

Dosage: 1 Extentab morning and evening, or as needed.

Supplied: Bottles of 100 and 500.

Also available: Dimetapp® Elixir for conventional *t.i.d.* or *q.i.d.* dosage. See package insert for further details.

A. H. ROBINS CO., INC.
RICHMOND, VIRGINIA 23220

A·H·ROBINS

---

*Schiller, I. W., and Lowell, F. C.: New England J. Med. 261:478, 1959.

The full ¼ grain of phenobarb in the formula
takes the nervous edge off the pain
...helps bring out the best in codeine

Phenaphen with Codeine the only leading compound analgesic that calms instead of caffeinates

Each capsule contains:

Phenobarbital (¼ gr.)	16.2 mg.
(Warning: may be habit forming)	
Aspirin (2½ gr.)	162.0 mg.
Phenacetin (3 gr.)	194.0 mg.
Hyoscyamine sulfate	0.031 mg.
Codeine phosphate	¼ gr. (No. 2), ½ gr. (No. 3), 1 gr. (No. 4)
(Warning: may be habit forming)	

Contraindications: Hypersensitivity to any ingredient.

Precautions: As with all phenacetin-containing products, avoid excessive or prolonged use.

Side Effects: Side effects are uncommon—nausea, constipation, and drowsiness have been reported.

A·H·ROBINS

A. H. ROBINS CO., INC., Richmond, Va. 23220

WSU Thyroid Day Set for Jan. 25

On January 25, Wayne State University will hold its annual Thyroid Day. Under the chairmanship of Nelson Taylor, M.D., the meeting will begin at 9:00 A.M. in the David Whitney House auditorium of the Wayne County Medical Society.

Speaking on the "Investigational Aspects of the Thyroid and the Heart" will be Roger Greif, M.D., of Cornell Medical College.

Clinical aspects will be covered by Richard J. Bing, M.D., of Wayne State University School of Medicine. There is no registration fee.

STUDY NURSING SERVICE CARE

The nursing hours per patient day received by patients 65 years of age and older at seven Michigan hospitals will be studied by the American Hospital Association in cooperation with the Greater Detroit Area Hospital Council, Inc., and the Michigan Hospital Association. The purpose of this study is to determine the difference in nursing service care being given to patients over 65 years of age as compared with care being given to patients under 65. The study will be done in several metropolitan areas across the nation.

HEMOPHILIA FOUNDATION HONORS KENT PHYSICIAN

The Michigan chapter of the National Hemophilia Foundation has chosen Richard De Mol, M.D., Grand Rapids, as its "Doctor of the Year."

The award goes to a practicing physician who serves a hemophilic family. Dr. De Mol was nominated for the award by Jim Gerritsen, a grateful hemophiliac, and his family.

Brown Now President Of Health Officers

Byron P. Brown, M.D., Charlotte, is the new President of the Michigan Health Officer's Association. Named Vice-President at the Association's recent annual meeting, Doctor Brown was advanced to the presidency when E. S. Parmenter, M.D., Alpena, resigned as medical director of District Health Department No. 4, serving Cheboygan, Presque Isle, Montmorency and Alpena counties, to become director of the Lee County Health Department in Dixon, Illinois.

Dr. Parmenter, health director in District 4 for more than 20 years, had been elected president of the Health Officer's Association at its annual meeting at Boyne Mountain.

Remember U-M Work By Nobel Prize Winners

Michigan doctors have a special interest in this year's Nobel Prize for Medicine, for the physicians awarded the Prize were once connected with the University of Michigan.

Dr. Payton Rous and Dr. Charles Huggins are sharing the 1966 Prize for their independent work in cancer research. Dr. Rous was an instructor in the University's department of pathology from 1906 to 1908, and Dr. Huggins was a resident in the department of surgery from 1925 to 1928.

Reed M. Nesbit, M.D., Dr. Huggins' roommate at the University Hospital when they were both residents, and now professor of surgery and head of the urology section at the University, says that "everybody who knows Charlie Huggins and his work has been expecting him to win the Nobel Prize for the last 10 or 15 years." Doctor Nesbit recalls Dr. Huggins as "an exceptionally fine surgeon, even as a resident, and an outstanding teacher — a real intellectual."

Dr. Huggins, who left the U-M in 1928 to go to the new University of Chicago School of Medicine as its first professor of urology, won the Prize for developing ways to control prostate cancer by use of hormones. Though this work was done at Chicago, Dr. Nesbit remembers that while at Michigan Dr. Huggins "discovered why the marrow is yellow in long bones and red in bones like the ribs. It was a very important discovery," he adds, "because it disclosed differences in temperature in different parts of the body."

Dr. Rous, who has been with the Rockefeller Institute (now Rockefeller University) since leaving Michigan, was recognized for his work in the viral causes of certain cancers. In 1910 he isolated the first virus found to cause sarcoma tumors in chickens. In 1928 the University of Michigan awarded Dr. Rous, a graduate of Johns Hopkins, an honorary doctor of science degree. That citation lauded "his studies of the blood and tissues and more especially his investigation of the effects of virus in producing cancer." It is only in the past 15 years or so that the theory of viral cancer has become generally accepted.

Six PKU Babies Found In Four Years in State

Since state-wide PKU testing of newborn babies was initiated about four years ago, the State Health Department has discovered six infants who were born with the disease. These children were part of a total of 172,000 babies tested.

Statistically, this amounts to one case of PKU in every 28,000 newborns, which is considerably less than the U. S. Children's Bureau estimate of one in every 15,000.

Each of the babies discovered with the disease is now under treatment. The PKU testing is probably going to save the state money in the long run, state health officials contend.

ANOTHER COMMUNITY COLLEGE TRAINS HEALTH PERSONNEL

The new Montcalm Community College this fall is offering a course in practical nursing. The school is approved by the Michigan Board of Nursing, and graduates will be eligible to take the state's licensed practical nurse examination.

Twenty-five students are enrolled in the course which includes, in addition to classroom work, patient care at area hospitals.

Clifford Randolph Dies

Clifford Randolph, 65, Detroit, owner of Randolph Surgical Supply Company, died Sept. 24 in Detroit.

Mr. Randolph also belonged to the Detroit Commandery K.T. No. 1, the Moslem Shrine and William M. Perret Lodge No. 524 F. & A.M. and the Detroit Board of Commerce.

U-M Research Budget Tops $50 Million

Research budget expenditures at The University of Michigan last year averaged $1-million per week.

U-M Vice President for Research A. Geoffrey Norman told University Regents Friday (Oct. 21) that the research budget for the 1965-66 fiscal year was $52 million — the first time it had exceeded $50 million.

This was an 8.8 per cent increase over the previous year, he said.

Most of the support — 78 per cent — came from federal agencies. Of these, the largest single source of support was the Department of Health, Education and Welfare, from which $12.7 million was obtained. Defense agencies combined were the source of $16.1 million.

INGRAM'S SERVICE DEPARTMENT

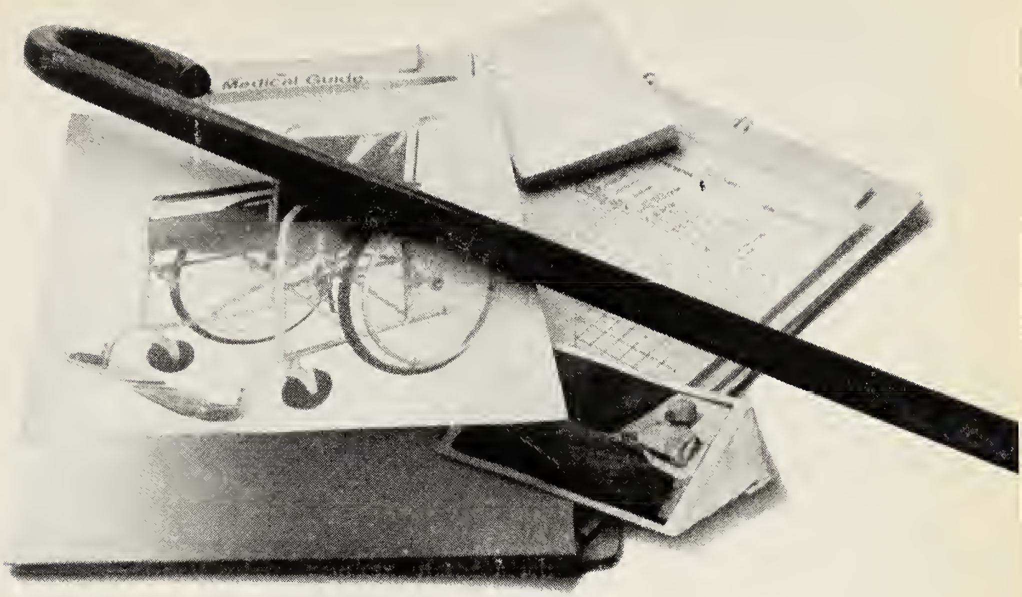
ALL FACTORY TRAINED MEN

We service Medical Equipment, Electrocardiographs, Basal Metabalors, Sterilizers, Autoclaves, Diathermy Outfits, Cutting Units, Ultra Violet Lamps, Hydro Therapy Units, Laboratory Equipment. ALL BURDICK, LIEBEL FLARSHEIM AND RITTER EQUIPMENT.

If you have any Service problems, please call us at TE 2-4444, ask for the SERVICE DEPARTMENT and we will gladly help in any way we can.

THE G. A. INGRAM COMPANY

4444 Woodward Avenue TEmple 2-4444 Detroit, Michigan 48201



in chronic illness

B and C vitamins are part of therapy: An imbalance of water-soluble vitamins and chronic illness often go hand in hand. STRESSCAPS capsules, containing therapeutic quantities of vitamins B and C, are formulated to meet the increased metabolic demands of patients with physiologic stress. In chronic illness, as with many stress conditions, STRESSCAPS vitamins are therapy.

Stresscaps®
Stress Formula Vitamins Lederle

FOR PROFESSIONAL RECOMMENDATION ONLY

Each capsule contains:

Vitamin B_1 (as Thiamine Mononitrate)	10 mg
Vitamin B_2 (Riboflavin)	10 mg
Vitamin B_6 (Pyridoxine HCl)	2 mg
Vitamin B_{12} Crystalline	4 mcgm
Vitamin C (Ascorbic Acid)	300 mg
Niacinamide	100 mg
Calcium Pantothenate	20 mg

Recommended intake: Adults, 1 capsule daily, for the treatment of vitamin deficiencies. Supplied in decorative "reminder" jars of 30 and 100; bottles of 500.

LEDERLE LABORATORIES, A Division of American Cyanamid Company, Pearl River, New York Lederle

628-6—3614

STRESSCAPS

Wait, Annabelle. Mommy hasn't told the doctor yet that you *need* a shot.

ybe she does, maybe she sn't. But if her problem is al congestion due to cold allergy, consider the medi- on that combines conve- nce and effectiveness— ahistine Melet.

lelet is especially suitable he treatment of children. It's leasant tasting, chewable et that leaves no aftertaste gritty, undissolved particles in the mouth. It provides decongestant action almost as quickly as a liquid, but assures the accurate dosage of a tablet.

Because Melets are so convenient to carry and so easy to take at any time, adults, too, will appreciate this modern dosage form.

Use cautiously in individuals with severe hypertension, diabetes mellitus, hyperthyroidism or urinary retention. Caution adults who operate machinery or motor vehicles that drowsiness may occur. Each Melet contains phenylephrine hydrochloride 10 mg. and chlorpheniramine maleate 2 mg.

NOVAHISTINE®
MELET

DOW **PITMAN-MOORE** Division of The Dow Chemical Company, Indianapolis

Blue Shield Board Elects Officers

The Michigan Medical Service Blue Shield, at its annual board meeting on October 12, elected the following officers for the coming year:

John M. Wellman, M.D., Lansing, re-elected president; John C. McCabe, Detroit, re-elected executive director; James B. Blodgett, M.D., Detroit, and Earl E. Conlin, Detroit, vice presidents; Carl H. Morgenstern, Grand Rapids, treasurer; and Walter J. Zimmerman, M.D., Royal Oak, secretary.

U-M Lists Courses For the New Year

The Department of Postgraduate Medicine of the University of Michigan announces the following activities:

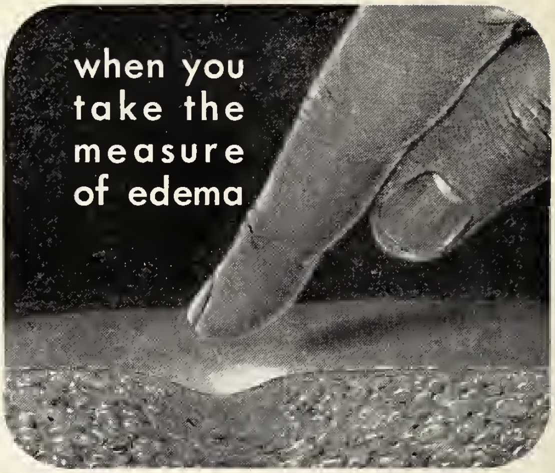
CONTINOUS PROGRAMS

Obstetrics & Gynecology	January 17-19
Pediatrics	January 23-25
Nuclear Medicine	February 1-3
Physiology with Clinical Application	February 6-10
Diseases of the Heart	February 20-24
Anatomy (Obstetrics-Gynecology)	February 27-March 10
Pathology (Obstetrics-Gynecology)	March 13-24
Gastroenterology	March 20-24
Practical Applications of Radiologic Diagnostic Methods	March 27-29
Endocrinology & Metabolism	February 13-17
Anatomy (Surgical)	April 10-May 19
Otorhinolaryngology Conference	April 13-15
Ophthalmology Conference	April 17-19
Electrocardiographic Diagnosis	April 17-21
Chronic Obstructive Pulmonary Disease	May 2-3
Recent Advances in Therapeutics	May 8-12
Thyroid Disease	May 15-16
Rheumatology	May 17-19
Northern Michigan Summer Program (as arranged)	June

INTERMITTENT PROGRAMS

Clinical Internal Medicine (Wednesdays) Wayne County General Hospital	January 4-March 29, 1967
Selected Clinical Topics (Tuesday evenings)	January 24-April 25, 1967
Anatomy (Thursdays)	January 19-May 4, 1967
Psychiatry for Pediatricians (Wednesdays)	February 15-May 3, 1967

General announcement available after August 1, 1966. For further information, address: Department of Postgraduate Medicine, W5610 University Hospital, Ann Arbor, Michigan 48104.



. . . introduce your patient to

AQUATAG®
(BENZTHIAZIDE)

AQUATAG (Benzthiazide) is a potent, orally active, nonmercurial, diuretic agent. It is effective orally in producing diuresis in edema states, where it is therapeutically comparable to mercurials given parenterally. AQUATAG (Benzthiazide) is mildly antihypertensive in its own right and enhances the action of other antihypertensive drugs when used in combination.

DIURETIC ACTION: Clinically, the oral administration of AQUATAG (benzthiazide) results in diuretic activity within two hours with maximal natriuretic, chloruretic, and diuretic effects occurring during the fourth, fifth and sixth hours. Maintenance of response continues for approximately 12 to 18 hours. Acidosis is an unlikely complication since therapeutic doses of AQUATAG (benzthiazide) do not appreciably increase bicarbonate excretion. Edematous patients receiving 50 mg. of AQUATAG (benzthiazide) daily for five days developed a maximal increase in the rate of sodium excretion on the first day, and maintained this high rate until depletion of excessive body stores of sodium.

In congestive heart-failure patients, AQUATAG (benzthiazide) produced the same weight loss, during a 48-hour treatment period as did a maximally effective dose of hydrochlorothiazide.

DOSAGE: Diuresis, initially 50 to 200 mg.; maintenance 25 to 150 mg., daily. Hypertension 50 to 100 mg. initially, adjusted to 50 mg. t.i.d. or downward to minimal effective dosage level.

WARNINGS: Use with caution in the presence of renal disease as azotemia may be precipitated or increased. In patients with advanced hepatic disease, electrolyte imbalance may result in hepatic coma. Dosage of coadministered antihypertensive agents should be reduced by at least 50%. In cases of suspected electrolyte imbalance, serum electrolyte determinations should he performed and imbalance, if any, corrected. Stenosis or ulcer of small intestine have been reported with coated potassium formulas, and surgery has been required and deaths have occurred. Based on surveys of both United States and foreign physicians, incidence of these lesions is low and a causal relationship in man has not been definitely established. Until further experience has been obtained, the use of the drug in pregnant patients should be weighed against possible hazards to the fetus.

CONTRAINDICATIONS: AQUATAG (benzthiazide) is contraindicated in progressive renal disease or dysfunction including increasing oliguria and azotemia. Continued administration of this drug is contraindicated in patients who show no response to its diuretic or antihypertensive properties. Severe hepatic disease is a relative contraindication. (See "Warnings" above.)

PRECAUTIONS AND SIDE EFFECTS: Electrolyte imbalance with hypokalemia (digitalis toxicity may be precipitated), hypochloremic alkalosis and hyponatremia may occur.

Patients with cirrhosis should be observed for impending hepatic coma and hypokalemia. Other reactions may include blood dyscrasias, hyperuricemia and gout, nausea, jaundice, anorexia, vomiting, diarrhea, dizziness, paresthesia, photosensitivity and headache. Hepatic fetor, tremor, confusion and drowsiness are signs of impending pre coma and coma in patients with cirrhosis. Insulin requirements may be altered in diabetes. AQUATAG (benzthiazide) should be used with caution post-operatively as hypokalemia is not uncommon. Potassium supplementation may be advisable pre- and post-operatively. There have been occasional reports of thrombocytopenia, leukopenia, agranulocytosis, aplastic anemia and precipitation of acute pancreatitis or jaundice.

Before prescribing or administering, read the package insert or file card available on request.

Available as 25 or 50 mg. scored tablets.

Request clinical samples and literature on your letterhead.

S. J. TUTAG
& COMPANY
Detroit, Michigan 48234

SQUIBB NOTES ON THERAPY

Breast-feeding and the "modern mother"

Despite a mild resurgence of interest in the importance of breast-feeding a few years ago, many women today do not choose to nurse their young. This is for a variety of reasons—social, economic, cultural and sometimes medical. In such cases the physician's task is to find the most suitable means of preventing lactation and easing the pain of breast engorgement.

The means of therapy

The value of hormone therapy for this indication is of course well established. Both androgen and estrogen are known to inhibit the production and secretion of the lactogenic hormone by the anterior pituitary. As estrogen levels decline sharply at parturition, lactogenesis is established. When androgen and estrogen are administered to the patient before the release of the lactogenic hormone lactation and breast engorgement are usually prevented.

The time of therapy

The time of administration of this combined medication is crucial; it must be given early enough to suppress the pituitary prolactin and last long enough to permit physiologic readjustment during the puerperium. Excellent results are most often seen when therapy is administered before the onset of the second stage of labor.

However, factors other than effectiveness must also be considered. The agent selected should not interfere in any way with parturition, subsequent uterine involution and the restoration of normal ovarian cyclic function. Furthermore, it should not cause rebound breast engorgement or other manifestations of hormonal imbalance.

A balanced formulation

Providing single-dose therapy for the prevention of lactation and breast engorgement, Deladumone OB is a potent androgen-estrogen combination with a prolonged action. The optimal balance of androgenic and estrogenic hormones achieved in this preparation minimizes the disadvantages inherent in single hormone therapy, such as rebound breast engorgement. Involution of the uterus and resumption of menstrual cycles are not affected.

As reported in a recent published study (Roser, D. M.: Obstet. & Gynec. *27*:73, 1966), Deladumone OB provided good suppression of breast engorgement in 95.3% and suppression of lactation in 81.1% of 86 obstetrical patients. These results are in general agreement with those of many earlier investigations; in several studies this injectable androgen-estrogen combination proved to be superior to oral medication.

Dosage:

As a single injection of 2 cc. before the onset of the second stage of labor.

Contraindications:

Established or suspected mammary cancer or genital malignancy.

Precautions and Side Effects:

Certain patients may be unusually responsive to either estrogenic or androgenic therapy. In such individuals virilization, uterine bleeding or mastodynia may occur.

Supply:

Deladumone OB, providing 180 mg. testosterone enanthate and 8 mg. estradiol valerate per cc., is available in 2 cc. Unimatic® disposable syringes and in 2 cc. vials. Both preparations are dissolved in sesame oil, with 2% benzyl alcohol as a preservative. *Before use, consult product literature for full prescribing information.*

Deladumone® OB

Squibb Testosterone Enanthate (180 mg./cc.)
and Estradiol Valerate (8 mg./cc.)
Single-dose injection for lactation inhibition

SQUIBB *'The Priceless Ingredient' of every product is the honor and integrity of its maker.*

How long will it take her to recover from her hip fracture if she just doesn't care?

Does she really care? Is she alert, encouraged, positive and optimistic about getting completely well soon?

Or has she given in to the demoralizing impact of confinement, disability and dependency?

When functional fatigue complicates convalescence, Alertonic can help…

Pleasant-tasting Alertonic is pipradrol hydrochloride—an effective cerebral stimulant whose gentle analeptic action helps counteract the apathy and inertia that can often delay convalescence—together with an excellent vitamin and mineral formula, in a satisfying 15% alcohol vehicle.

Nothing fosters confidence and a sense of well-being better than your own personal warmth, understanding and encouragement together with Alertonic to help insure prompt response.

Adequate dosage is important: Prescribe Alertonic—one tablespoonful t.i.d., 30 minutes before meals…tastes best chilled.

And for your patient's sake, prescribe Alertonic in the convenient, economical one-pint bottle.

Alertonic®

Available Only On Prescription

Each 45 cc. (3 tablespoonfuls) contains: alcohol, 15%; pipradrol hydrochloride, 2 mg.; thiamine hydrochloride (vitamin B_1) (10 MDR*), 10 mg.; riboflavin (vitamin B_2) (4 MDR), 5 mg.; pyridoxine hydrochloride (vitamin B_6), 1 mg.; niacinamide (5 MDR), 50 mg.; choline,† 100 mg.; inositol,† 100 mg.; calcium glycerophosphate, 100 mg. (supplies 2% MDR for calcium and for phosphorus) and 1 mg. each of the following: cobalt (as chloride), manganese (as sulfate), magnesium (as acetate), zinc (as acetate), and molybdenum (as ammonium molybdate).

*Multiple of adult Minimum Daily Requirement supplied.
†The need for these substances in human nutrition has not been established.

Indications: 1. Functional fatigue such as that often associated with: a depressing life experience or stressful time of life; advancing years; convalescence; limited activity or confinement. 2. Poor appetite and vitamin-mineral deficiency as they occur in: patients having faulty eating habits; geriatric patients who are losing interest in food; patients convalescing from debilitating illness or surgery.

Dosage: Adults, 1 tablespoonful; children (over 15 years old), 1 to 2 teaspoonfuls; children (4 to 15 years old), 1 teaspoonful. To be taken three times daily 30 minutes before meals.

Contraindications: As with other drugs with CNS stimulating action, Alertonic is contraindicated in hyperactive, agitated or severely anxious patients and in chorea or obsessive compulsive states.

Side effects: Reports of overstimulation have been rare. Patients who are known to be unduly sensitive to the effects of stimulant drugs should be observed carefully in the initial stages of treatment.

Merrell
THE WM. S. MERRELL COMPANY
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215

Detroit Medical Society Helps Nigerian Student

The Detroit Medical Society's Annual Thanksgiving-Eve Cabaret party helped finance the education of a Nigerian student's freshman year in medical school at Howard University, through its contribution to the African Medical Education Fund.

At the beginning of the fall term the Nigerian student found himself in a dilemma because the money he needed was not available from the AMEF whose budget had already been used up.

Charles Whitten, M.D., chairman of AMEF's credentials committee, asked the Detroit Medical Society to help. Within 10 days he raised $1,000 and that plus 500 dollars from the AMEF treasury was enough to launch the student on his career.

WSU BLOOD SYMPOSIUM SET FOR JAN. 20-21

The Fifteenth Annual Wayne State University Symposium on Blood will be held in the McGregor Memorial Conference Center on January 20 and 21, 1967. The presentation of papers is scheduled to begin at 8:45 a.m., Friday.

The main theme of the symposium will be the biochemistry and physiology of fibrinolysis. Several presentations are planned on the topic of prothrombin chemistry, and will be scheduled for Saturday morning.

The suggested accommodation for guests is the Park Shelton Hotel located near the conference center. Everyone interested is cordially invited to attend.

The chairman is Walter H. Seegers, M.D.

Michigan Society for Mental Health Elects 3 Doctors

Seven new members were elected to the State Board of Directors of the Michigan Society for Mental Health, signalling the beginning of the Society's 30th year of helping Michigan's mentally ill children, adolescents and adults.

Eleven incumbent board members also were re-elected.

New to the Society's state board will be two physicians, Dean P. Carron, M.D., Ann Arbor psychiatrist and member, Washtenaw County Community Mental Health Services Board, and Jose J. Llinas, M.D., Lansing, psychiatric program director, Ingham County Community Health Services Board.

Among those re-elected were Francis P. Rhoades, M.D., Detroit.

Personalized Professional Service

Professional function and image . . . style . . . variety . . . you can enjoy all these benefits in design-coordinated offices and examining rooms created by Noble-Blackmer. If you prefer, we will even create a color scheme, and handle the interior decoration.

Noble-Blackmer stands ready to help you create an efficient, functional office that saves you time and energy . . . one which will create the proper professional image with your patient.

Depend on Noble-Blackmer for Supplies, Pharmaceuticals and Equipment for
- **Physicians** • **Hospitals**
- **Nursing Homes** • **Laboratories**

NOBLE-BLACKMER, Inc.
personalized professional service

801 S. Brown St.
Jackson, Michigan
Ph. (517) 787-3110

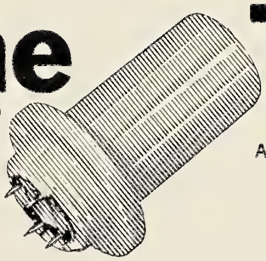
533 W. Whitcomb St.
Kalamazoo, Michigan
Ph. (616) 345-5125

what time is it?

For the past
two years
there's been
one new case
of active tuberculosis
reported for every
four thousand
of U.S. population.

it's time to tine.

Tuberculin,
Tine Test
(Rosenthal) Lederle



Available in 5's and 25's.
Order now
from your pharmacist
or your Lederle
representative.

LEDERLE LABORATORIES, A Division of American Cyanamid Company, Pearl River, New York Lederle
414-6—4046R

against the usual gram-negative urinary pathogens

Why use five...where **one** will do?

In a recent 217-patient hospital study,[1] urinary tract infections were treated with a variety of widely prescribed antimicrobial agents including: a sulfonamide (40 patients), chloramphenicol (20 patients), nitrofurantoin (33 patients), nalidixic acid (30 patients), tetracycline (27 patients), colistimethate sodium (22 patients)...and 2 combinations of 5 agents each (45 patients). The 2 combinations were selected to afford maximal theoretical antibacterial coverage against the usual urinary pathogens. They were (1) tetracycline, chloramphenicol, nitrofurantoin, ristocetin and polymyxin B; and (2) tetracycline, chloramphenicol, erythromycin, nitrofurantoin and colistimethate sodium.

This clinical study shows that the two combinations of antibiotics were not superior to some of their single components. The authors point out that antibiotic antagonism often negates theoretical advantages of multiple therapy. Coly-Mycin Injectable (colistimethate sodium) was one of the single components that was shown to be equal to the combinations and eradicated bacteriuria in two-thirds of the patients.

Theoretical choice of multiple antibacterial therapy has been shown to be no more effective than one well-chosen agent which also offers least patient exposure to possible side reactions, toxicities, allergic manifestations and higher drug costs.

1. McCabe, W. R., and Jackson, G. G.: New England J. Med. *272*:1037, 1965.

in gram-negative urinary tract infections often the single well-chosen agent

COLY-MYCIN
INJECTABLE

Coly-Mycin® Injectable

(colistimethate sodium)

Indications: Especially indicated for the treatment of severe acute and resistant chronic urinary tract infections due to sensitive strains of gram-negative organisms. Also indicated in respiratory tract, surgical, wound and burn infections and in septicemia due to sensitive organisms. Particularly indicated when any of these infections are caused by sensitive strains of *Pseudomonas aeruginosa.*

Adverse Reactions: Occasional reactions such as circumoral paresthesias, tingling of the extremities, pruritus, vertigo or dizziness may occur. Reduction of dosage may alleviate symptoms. Therapy need not be discontinued, but such patients should be observed with extra care.

Warning: Patients should be cautioned not to drive vehicles or use hazardous machinery while on therapy.

Precautions: In cases of impaired or suspected renal impairment, use with greater caution and reduce dosage in proportion to extent of impairment. Transient elevations of BUN have been reported. As a routine precaution, appropriate blood studies should, therefore, be made during prolonged therapy.

As with all polypeptides, the possibility of muscular weakness, including apnea, due to inadvertent overdosage or normal dosage in the presence of impaired renal function, should not be overlooked. In cases of apnea, medication should be promptly discontinued and assisted respiration given until serum levels fall and normal breathing is restored.

Other antibiotics, such as kanamycin, streptomycin, dihydrostreptomycin, polymyxin, and neomycin, may also have varying neurotoxic or nephrotoxic potential. They should be used with great caution concomitantly with Coly-Mycin Injectable (colistimethate sodium).

For deep intramuscular injection only.

Dosage: By the I.M. route only, in 2 to 4 divided doses ranging from 1.5 to 5 mg./Kg./day (0.7 mg. to 2.3 mg./lb./day). Average adult dose is 2.5 mg./Kg./day (1.1 mg./lb./day). In the presence of bacteremia, septicemia, or other serious infection, greater than average doses may be required; however, maximum daily doses should not exceed 5 mg./Kg. (2.3 mg./lb.) where renal function is normal.

Not recommended against Proteus.

Colistin is also available (as colistin sulfate) in: Coly-Mycin® Pediatric for Oral Suspension (not for systemic use), and Coly-Mycin® Otic with Neomycin and Hydrocortisone.

Full information is available on request.

01-GP-69-R2

WARNER-CHILCOTT Morris Plains, New Jersey

MARQUETTE-ALGER SOCIETY PROPOSAL THAT NMU TRAIN NURSES WINS APPROVAL

Northern Michigan University board of control will approach the State Board of Education on the possibility of instituting a baccalaureate degree program in nursing.

Acting on a proposal originally submitted by the Marquette-Alger County Medical Society, the Board of Control endorsed the proposal of a four-year course offering a bachelor of science-registered nurse degree. Furthermore, the Board directed Edgar L. Harden, President of NMU, to pursue the plan with the State Board.

Considerable interest, both local and from the Upper Peninsula, has been shown in such a program, according to President Harden. President Harden told the Board that since the University already teaches most of the courses required of students enrolled in St. Luke's School of Nursing, the initial cost of expanding the program should not be prohibitive. Ultimately, of course, the expense of development would be greater, he pointed out.

Ogden E. Johnson, chairman of the NMU Board, commented that he "would hope that we might develop a school of nursing, assuming funds will be available."

Begin Dental Research Institute at U-M

The University of Michigan has taken formal action to establish a Dental Research Institute to expand dental research "at the highest possible level."

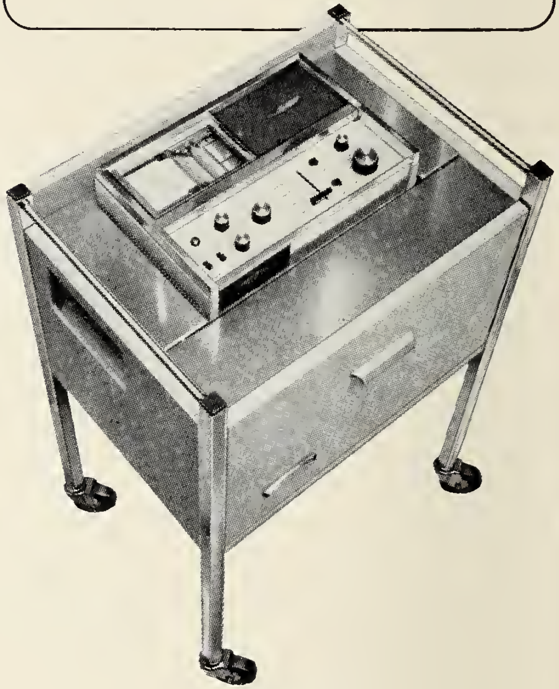
To be located in the Medical Center, the Institute will make increased research programs possible, particularly in the field of oral health.

A second major objective is to provide research training to those preparing to become either basic scientists or clinical researchers in fields related to oral health.

Programs will be structured in the basic science departments of the U-M Medical School — anatomy, biological chemistry, human genetics, pathology, pharmacology, physiology and microbiology — and to the oral biology department of the School of Dentistry.

PATRONIZE ADVERTISERS

The dramatically new
Burdick EK 4
Electrocardiograph



What is a new ECG?

Take a look at the Burdick EK 4! Many important improvements have been made in electrocardiographs in recent years — this is why we invite your closer inspection of the EK 4. Reliability, diagnostic accuracy, and freshness of design are apparent in every detail. Precise recordings of high fidelity ● Designed for use with auxiliary equipment, phone transmission, permanent recording of monitoring phenomena ● Fast switching from lead to lead ● 25-50 mm. speeds ● ½ x 1 x 2 standardization on all leads ● High frequency response permits use with PC-100 Heart Sound Preamp ● Stable ● Lightweight. If your present ECG can't offer you these up-to-date features, take a closer look at the EK 4. The EK 4 is a sound investment for your practice or department, and it's backed by Burdick dealer service. Write us. The Burdick Corporation, Milton, Wisconsin 53563.

THE G. A. INGRAM COMPANY

4444 Woodward Avenue, Detroit, Michigan 48201
Telephone: TEmple 2-4444

Frankly, most antihypertensives are pretty good if you give an adequate dose. I'm looking for one with a simple regimen so that mix-ups in doses and therefore the chance of side effects are minimized.

Regroton®
chlorthalidone 50 mg, reserpine 0.25 mg.

1 tablet daily
brings pressure down

Advantage: Both components of Regroton are long-acting.
Average dosage: One tablet daily with breakfast.
Contraindications: History of mental depression, hypersensitivity, and most cases of severe renal or hepatic diseases.
Warning: Discontinue 2 weeks before general anesthesia, 1 week before electroshock therapy, and if depression or peptic ulcer occurs. With administration of enteric-coated potassium supplements, the possibility of small bowel lesions should be kept in mind.
Precautions: Reduce dosage of concomitant antihypertensive agents by one-half. Discontinue if the BUN rises or liver dysfunction is aggravated. Electrolyte imbalance and potassium depletion may occur; take particular care in cirrhosis or severe ischemic heart disease, and in patients receiving corticosteroids, ACTH, or digitalis. Salt restriction is not recommended. Use with caution in patients with ulcerative colitis, gallstones, or bronchial asthma.
Side effects: Nausea, vomiting, diarrhea, muscle cramps, headaches and dizziness. Potential side effects include angina pectoris, anxiety, depression, drowsiness, hyperglycemia, hyperuricemia, lassitude, leukopenia, nasal stuffiness, nightmare, purpura, urticaria, and weakness.
For full details, see the complete prescribing information.
Availability: Bottles of 100 and 1000 tablets.

Geigy

Lansing Group Surveys Uses of Computers

Three Lansing men are investigating the possible use of computers to improve medical practice. They are William Knisely, Ph.D., director of the Institute for Biology and Medicine at Michigan State University, Robert Stow, M.D., and Jerome Cordes, M.D., both of Lansing.

The greatest potential for the computers, according to Doctor Stow, is as a time-saver. "We hope that eventually it will enable the physician to have more time to spend with individual patients and to make medical judgments," he said. "Any time the physician is not making medical judgments, he's wasting his time."

"We hope that through computers," Doctor Stow added, "we can get away from a lot of conventional record keeping and usual ways of reporting things like X-rays, lab proceedings, electrocardiograms."

"We really don't know what type of record keeping this will result in," he emphasized. "Up until now we have been applying computers to the conventional records. Our hope is to take the computer directly to the patient and adopt new methods of recording.

"In other words, if we can use the computer directly with the patient, disregarding the conventional method of reporting, a whole new type of record keeping may evolve."

Through the cooperation of Sparrow and St. Lawrence hospitals, the new medical school at Michigan State University, and the MSU computer laboratories, these Lansing men hope to direct both students of medicine in the use of computers, and computer students in the potentialities of using their skills in the field of medicine.

"Because this is a new field it is hard to predict where it will go," Doctor Stow concluded. "Right now we are only in the planning and investigation stages."

Several months ago, Doctor Stow represented MSMS at a special AMA workshop on the possible uses of computers in medicine.

Moench Heads MABH

G. Frederick Moench, M.D., Midland, is the new President of the Michigan Association for Better Hearing. Dr. Moench was elected to the one-year term during the Association's annual meeting held in Lansing.

★

Specialized Service

IN

PROFESSIONAL LIABILITY INSURANCE

is a high mark of distinction

THE

MEDICAL PROTECTIVE COMPANY

FORT WAYNE, INDIANA

Professional Protection Exclusively since 1899

DETROIT OFFICE: G. A. Triplett, R. K. Wind and R. H. Harp, Representatives
2405 West McNichols Road, Detroit 48221 Telephone: 313-862-8064

GRAND RAPIDS OFFICE: G. J. Haworth, Representative
422 Federal Square Building, Grand Rapids 49502 Telephone: 616-454-4477

SQUIBB NOTES ON THERAPY

"'Tranquilizer' is not a good word"[1]

THIS classification is psychologically too seductive, pharmaco-ogically too unspecific, and in erms of results not infrequently untrue."[2]

What is a tranquilizer? According o the 24th Edition of Dorland's Medical Dictionary[3] a tranquilizer s "an agent which acts on the emotional state, quieting or calming the patient without affecting clarity of consciousness."

Defining a drug by its effects, however, can be misleading. The same effects by which the dictionary defines a tranquilizer have sometimes been seen after administration of a sedative — or, for that matter, a placebo.

Ambiguous though the term may be, it appears to be here to stay. The 1966 edition of the Physicians' Desk Reference[4] lists 42 tranquilizers indicated for treatment of anxiety and apprehensive states.

'Tranquilizers' have differences in action, differences in effect

Although all tranquilizers are intended to calm anxious patients there *are* differences in their actions — and in their effects. They have been divided into three categories — the rauwolfia group, the 'minor' tranquilizers, and the phenothiazines.[5]

Although the tranquilizing effect of rauwolfia has been known for centuries, its use as an antipsychotic agent in current practice has diminished.[5]

A 'minor' tranquilizer is often prescribed to achieve more than one effect. Thus, besides being tranquilizers some of these compounds may be muscle relaxants, antihistaminics with some calming action, anticholinergic sedatives, or antispasmodics.[5]

The phenothiazines are considered 'major' tranquilizers because they alter psychotic behavior.[1] This classification may have done them more harm than good because it implies that the phenothiazines should be reserved for the more severely disturbed. This is not necessarily true.

The phenothiazines — and the problem of sedation

One of the problems of prescribing phenothiazines for ambulatory patients has been the fear that excessive sedation will impair the patient's ability to function. This, however, is less of a problem with some of the phenothiazines.

"Clinically they may be differentiated primarily in terms of their potency and the extent of their sedative effect, which appear to be inversely proportional. That is, the least potent, the one which is used in highest dosage, chlorpromazine, is the most sedative, while the reverse holds true for fluphenazine."[6]

In a recent report on various studies conducted over several years evaluating 360 patients treated for anxiety and stress with seven phenothiazines, this inverse relationship of potency to sedation was confirmed.[7] Also under consideration was the degree to which the particular phenothiazines neutralized anxiety (the angolytic index). Interestingly enough there was, again, an inverse relationship. The most sedative of the phenothiazines appeared to be the least active in neutralizing anxiety. Fluphenazine, one of the least sedative, on the other hand, was found to be most effective in relieving anxiety.[7]

RELATIVE SEDATIVE AND ANGOLYTIC INDICES OF PRINCIPAL PHENOTHIAZINES*

DRUG	SEDATIVE INDEX	ANGOLYTIC INDEX	BASED ON STANDARD DOSE OF
Chlorpromazine	100	15	25 mgs.
Triflupromazine	100	15	25 mgs.
Thioridazine	90	17	25 mgs.
Perphenazine	15	25	4 mgs.
Carphenazine	25	25	25 mgs.
Trifluoperazine	3.3	95	2.0 mgs.
Fluphenazine	3.5	100	2.5 mgs.

*adapted from Sainz[7]

Prolixin is therapeutically effective without excessive sedation

When used as a 'tranquilizer' in general medical practice, in many patients Prolixin (Squibb Fluphenazine Hydrochloride) suppresses anxiety, but not normal activity. These two features are of particular importance to patients who must be able to live and work without their normal daily activities being restricted.

Because of its longer duration of action, Prolixin, in doses of as little as one to three milligrams in adults, generally taken once a day, is effective in maintaining many patients free of their symptoms of anxiety and tension.

Contraindications: Do not use with high doses of hypnotics or in patients with subcortical brain damage. Use with caution in patients with a history of convulsive disorders. Severe reactions may occur in patients with idiosyncrasy to other centrally-acting drugs, and severe hypotension may occur in patients with special medical disorders, e.g. mitral insufficiency and pheochromocytoma.

Precautions: Effects of atropine, anesthetics and C.N.S. depressants may be potentiated. Hypotension may occur in patients undergoing surgery. Do not use epinephrine for treatment of the hypotensive reactions which may appear in patients on phenothiazine therapy.

Side Effects: Extrapyramidal reactions, allergic skin reactions, the possibility of anaphylaxis, drowsiness, visual blurring, dizziness, insomnia, nausea, anorexia, salivation, edema, perspiration, dry mouth, abnormal lactation, polyuria, hypotension, and jaundice and biliary stasis may occur. Routine blood counts are recommended to determine possible blood dyscrasias; if symptoms of upper respiratory infection occur, discontinue drug and institute appropriate therapy.

Available: 1 mg. tablets. Bottles of 50 and 500.

For full prescribing information, see package insert.

References: 1. Simpson, G.M.: Postgrad. Med. *39*:557, 1966. 2. Freyhan, F.A.: Am. J. Psychiat. *115*:577, 1959. 3. Dorland's Illustrated Medical Dictionary, ed. 24, Philadelphia, W. B. Saunders Co., 1965, p. 1603. 4. Physicians' Desk Reference, 1966, Oradell, N.J., 1965, p. 310. 5. Cohen, S.: Northwest Med.: *65*:197, 1966. 6. Detre, T., and Jarecki, H.: Connecticut Med. *25*:553, 1961. 7. Sainz, A.: Psychosomatics *5*:167, 1964.

PROLIXIN®

SQUIBB FLUPHENAZINE HYDROCHLORIDE

SQUIBB

'The Priceless Ingredient' of every product is the honor and integrity of its maker.

block
end
runs
98
98
LOMOTIL

LOMOTIL® Each tablet and each 5 cc. of liquid contains:
diphenoxylate hydrochloride..... 2.5 mg.
(Warning: May be habit forming)
atropine sulfate .... 0.025 mg.

tablets/liquid

tackles the problem of diarrhea directly

Effectiveness—Physiologic evidence indicates that Lomotil acts directly on the smooth muscle of the bowel to lower motility and control diarrhea. This action is unsurpassed in promptness and efficiency.

Convenience—Lomotil is available as small, easily carried, virtually tasteless tablets and as a pleasant, fruit-flavored liquid.

Versatility—The therapeutic efficiency, safety and convenience of Lomotil may be used to advantage alone or adjunctively in diarrhea associated with:

• Functional hypermotility • Acute infections • Malabsorption syndrome • Drug therapy • Gastroenteritis and colitis • Irritable bowel • Regional enteritis • Ileostomy • Ulcerative colitis • Food poisoning

For correct therapeutic effect
Rx correct therapeutic dosage

Dosage: The recommended initial daily dosages, given in divided doses until diarrhea is controlled, are:

Children: Total Daily Dosage

3-6 mo. . . ½ tsp.* t.i.d. (3 mg.)
6-12 mo. . ½ tsp. q.i.d. (4 mg.)
1-2 yr. . . . ½ tsp. 5 times daily (5 mg.)
2-5 yr. . . . 1 tsp. t.i.d. (6 mg.)
5-8 yr. . . . 1 tsp. q.i.d. (8 mg.)
8-12 yr. . . 1 tsp. 5 times daily (10 mg.)

Adults: 2 tsp. 5 times daily (20 mg.)
(or 2 tablets q.i.d.)

*Based on 4 cc. per teaspoonful.

Maintenance dosage may be as low as one-fourth the initial daily dosage.

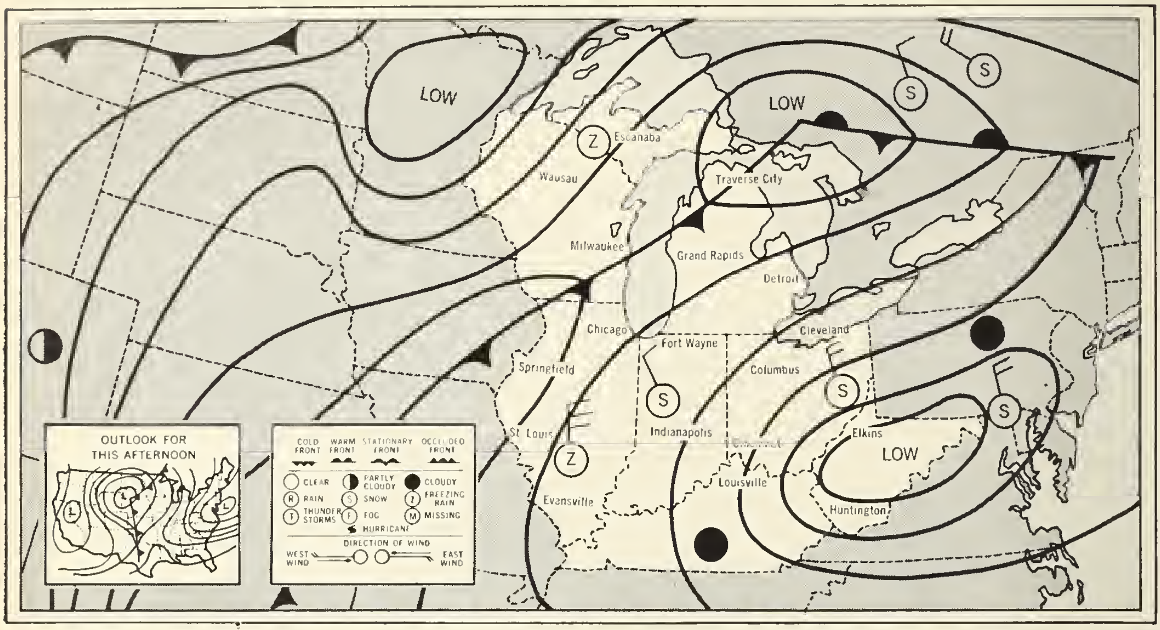
Precautions: Lomotil, brand of diphenoxylate hydrochloride with atropine sulfate, is a Federally exempt narcotic preparation of very low addictive potential. Lomotil should be kept out of reach of children since accidental overdosage may cause severe respiratory depression. Recommended dosages should not be exceeded. Lomotil should be used with caution in patients with impaired liver function and in patients taking addicting drugs or barbiturates. The subtherapeutic amount of atropine is added to discourage deliberate overdosage.

Side Effects: Side effects are relatively uncommon but among those reported are gastrointestinal irritation, sedation, dizziness, cutaneous manifestations, restlessness, insomnia, numbness of extremities, headache, blurring of vision, swelling of the gums, euphoria, depression and general malaise.

SEARLE *Research in the Service of Medicine*

REGIONAL WEATHER FORECAST

Severe Snow Storms, Strong Winds and Bitter Cold Followed by Cough, Stuffed and Runny Noses and Aches and Pains.


LOW
LOW
Escanaba
Wausau
Traverse City
Milwaukee
Grand Rapids
Detroit
Chicago
Fort Wayne
Cleveland
Springfield
Columbus
St. Louis
Indianapolis
Elkins
LOW
Louisville
Evansville
Huntington
OUTLOOK FOR THIS AFTERNOON
COLD FRONT
WARM FRONT
STATIONARY FRONT
OCCLUDED FRONT
CLEAR
PARTLY CLOUDY
CLOUDY
RAIN
SNOW
FREEZING RAIN
THUNDER STORMS
FOG
MISSING
HURRICANE
DIRECTION OF WIND
WEST WIND
EAST WIND

Tussagesic breaks up coughs, quickly clears stuffed and runny noses and relieves aches and pains. Provide coverage of the tough cold for up to 24 hours with just a single timed-release tablet dosed morning, midafternoon and at bedtime.

each

Tussagesic®

timed-release tablet contains:

Triaminic® (phenylpropanolamine hydrochloride 25 mg., pheniramine maleate 12.5 mg., pyrilamine maleate 12.5 mg.)	50 mg.
Dextromethorphan hydrobromide	30 mg.
Terpin hydrate	180 mg.
Acetaminophen	325 mg.

Dosage: Adults—1 tablet, swallowed whole to preserve timed-release feature, in morning, midafternoon and at bedtime. *Side effects:* Occasional drowsiness, blurred vision, cardiac palpitations, flushing, dizziness, nervousness or gastrointestinal upsets. *Precautions:* The patient should be advised not to drive a car or operate dangerous machinery if drowsiness occurs. Use with caution in patients with hypertension, heart disease, diabetes or thyrotoxicosis.

DORSEY LABORATORIES · *a division of The Wander Company* · **LINCOLN, NEBRASKA**

Conduct Community Study In Berrien on Pesticides

By Michigan Department of Public Health

Several years ago, the late Rachel Carson's book *Silent Spring* aroused a great deal of national interest in the subject of pesticides and their immediate benefits as contrasted to their possible long range threats to health. As with many other controversial public health concerns, opinions quickly polarized, with the critics of Miss Carson poo-pooing her book and her adherents strongly supporting her arguments.

In fact, it is true that many pesticides have not been thoroughly investigated for their impact on human health after long environmental exposure, and very little is known about many disease conditions which may develop years after accidental exposure. To help answer some of these questions and to determine the possible relationships between the use of pesticides and long-term effects on health, a nation-wide study has been underway for over a year.

* * *

FINANCED BY THE U. S. Public Health Service, the study is being conducted in Michigan, and in eleven other states, with the probability that 20 states will eventually become involved. The study is being conducted by the Michigan Department of Public Health, in cooperation with the Entomology Department of Michigan State University, and the Berrien County Health Department.

The primary purpose of the research project is to obtain, through the use of epidemiological-toxicological procedures, information which will establish the effects, if any, of varying degrees of exposure to pesticides on human health. Berrien County was selected as the area for this study in Michigan because it embodies the necessary characteristics desired: it is readily accessible; it has a stable population suitable for epidemiological studies; it has a history of long and intensive use of pesticides; and there is a varied exposure pattern within the population from very high to minimal.

* * *

THE MICHIGAN PESTICIDE Study includes the following three program areas:

1. The community profile phase which involves identification of the population groups of the community selected for study, including a high exposure group consisting of fruit and vegetable growers who apply pesticides, and commercial applicators of pesticides; the intermediate environmentally-exposed group consisting of dairy and general farmers and rural non-farm residents; and an urban control or minimal exposure group consisting of persons living in metropolitan centers within the study area. The community profile also includes a continuing and detailed study on the use of pesticides in the study area, delineating the types and amounts of pesticides used annually, the methods used, times of application, and purposes for which the pesticides are used.

2. A monitoring-surveillance program designed to measure levels of pesticides in man's environment. This involves the collection and analysis of environmental samples including air, water, food, fabrics, fish, wildlife, soils, household dust, etc.

3. The epidemiological and clinical study which involves the intensive study and health supervision of approximately 30 persons within each of the three exposure groups identified in the community profile portion of the project. All of these persons receive complete periodic physical examination and continuous follow-up through the monthly analysis of body fluids, plus whatever additional investigative procedures are indicated.

* * *

THE COMMUNITY STUDIES on Pesticides in the several states are being organized on a long-term basis and it is expected that they will continue for a period of five or more years.

Mercywood MERCY

Established 1924

MERCYWOOD HOSPITAL

4038 Jackson Road *Conducted by Sisters of Mercy* Ann Arbor, Michigan

Telephone — 313 663-8571

Mercywood Hospital is a private neuro-psychiatric hospital licensed by the Michigan Department of Mental Health. Mercywood specializes in intensive, multidisciplinary treatment for emotional and mental disorders.

Accredited by the Joint Commission on Accreditation of Hospitals and the National League of Nursing. A full Blue Cross participating hospital.

Certified for: Medicare and M.A.A. programs.

PSYCHIATRIC STAFF

Robert J. Bahra, M.D.
Dean P. Carron, M.D.
Francis M. Daignault, M.D.
Gordan C. Dieterich, M.D.
Stuart M. Gould, Jr., M.D.
Leonard E. Himler, M.D.
Stephen C. Mason, M.D.
Richard D. Watkins, M.D.
Rudolf E. Nabel, M.D.
Sydney Joseph, M.D.
James R. Driver, M.D.

From the Mailbag

Dear Doctor Towsley:

Thank you for the many kindnesses that made my recent visit to your most hospitable state so very memorable. I have never experienced an occasion when so much planning, thoughtfulness and warmth was put forth to make a scientific program so successfully friendly. Please convey my appreciation especially to Miss Schulte, Doctor Neiswander, and Doctor Wassink for their personal courtesies. They made my stay a genuine pleasure.

Sincerely,
John W. Goldschmidt, M.D.
Jefferson Medical College Hospital
(Annual Session Lecturer)

* * *

Dear Dr. Towsley:

I want to thank you and the membership of the Michigan State Medical Society for your generous hospitality to me during my recent trip to Michigan. Dr. Murray Abell and Dr. Harold Bowman were particularly gracious hosts and were very generous of their time. It was a most pleasant and rewarding experience for me.

Sincerely yours,
Robert E. Scully, M.D.
Massachusetts General Hospital
(Annual Session Lecturer)

* * *

Dear Doctor Hiscock:

I want you to know that it was a pleasure for both Mrs. Adams and me to be with you at your 101st Annual Session ending with the banquet the day we were there.

The Executive Committee of our Illinois State Medical Society was very pleased with the report I brought back indicating the high caliber of your scientific program and the enthusiastic attendance at your Annual Meeting.

Hoping that I will have the pleasure of seeing you at one of our Illinois State Medical Society annual meetings in the not-too-distant future and with all best wishes, I am

Sincerely yours,
William E. Adams, M.D.
Past Chairman of the Council
Illinois State Medical Society

The 1966 MSMS House of Delegates expressed disapproval of any legislation which would compel exclusive use of generic names of drugs.

HACK SHOE CO.

50 years
of
Service to the Profession

1916 — 1966

DOWNTOWN DETROIT
33 East Adams

NORTH END
19360 Livernois Ave.

EAST DETROIT
20901 Kelly Road
(2 blocks N. of 8 Mile)

BIRMINGHAM
235 Pierce St.

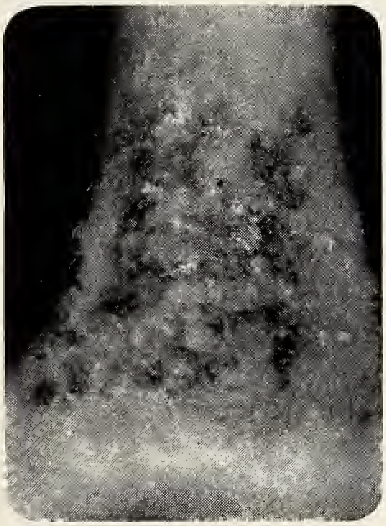
KINGSWOOD HOSPITAL, Michigan's finest and newest facility for intensive, short-term treatment of voluntary neuropsychiatric patients.

Philip N. Brown, M.D.
Medical Director

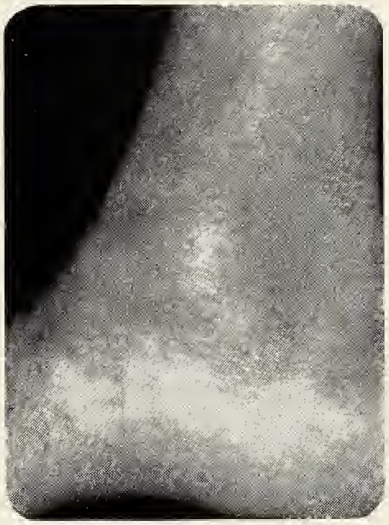
Marvin J. Lawrence, F.A.C.H.A.
Administrator

KINGSWOOD HOSPITAL
10300 W. EIGHT MILE ROAD
FERNDALE 20, MICHIGAN Telephone: Area 313 398-3200

Eczema of many years... controlled in two weeks



Before treatment



After treatment —
with ARISTOCORT Topical
Ointment 0.1% for two weeks

ARISTOCORT® Triamcinolone Acetonide Topicals have proved exceptionally effective in the control of various forms of eczema: allergic, atopic, nummular, psoriatic, and mycotic.

In most cases responsive to topical ARISTOCORT, the 0.1% concentration is sufficiently potent. The 0.5% concentration provides enhanced topical activity for patients requiring additional potency for proper relief.

Administration and Dosage: Apply sparingly to the affected area 3 or 4 times daily. Some cases of psoriasis may be more effectively treated if the 0.1% Cream or Ointment is applied under an occlusive dressing.

Contraindications: Tuberculosis of the skin, herpes simplex, chicken pox and vaccinia.

Precautions and Side Effects: Do not use in the eyes or in the ear (if drum is perforated). A few individuals react unfavorably under certain conditions. If side effects are encountered, the drug should be discontinued and appropriate measures taken. Use on infected areas should be attended with caution and observation, bearing in mind the potential spreading of infection and the advisability of discontinuing therapy and/or initiating antibacterial measures. Generalized dermatological conditions may require systemic corticosteroid therapy. Steroid therapy, although responsible for remissions of dermatoses, especially of allergic origin cannot be expected to prevent recurrence. The use over extensive body areas, with or without occlusive nonpermeable dressings, may result in systemic absorption. Appropriate precautions should be taken. When occlusive nonpermeable dressings are used, miliaria, folliculitis and pyodermas will sometimes develop. Localized atrophy and striae have been reported with the use of steroids by the occlusive technique. When occlusive nonpermeable dressings are used, the physician should be aware of the hazards of suffocation and flammability. The safety of use on pregnant patients has not been firmly established. Thus, do not use in large amounts or for long periods of time on pregnant patients.

Available in 5 Gm. and 15 Gm. tubes and ½ lb. jars.

PHOTOGRAPHS COURTESY OF M. M. NIERMAN, M.D.

Aristocort® Topical Ointment 0.1% and Cream 0.1%, 0.5%
Triamcinolone Acetonide
Also available in foam form.

Lederle LEDERLE LABORATORIES, A Division of American Cyanamid Company, Pearl River, New York

406-6

Congress Expects Proposals to Amend Medicare, Medicaid

BY AMA WASHINGTON BUREAU

Washington, D.C.—High on the list of health legislation to be considered by the new Congress convening Jan. 10 are proposals to amend both the medicare and medicaid programs.

Proposed medicare amendments would extend the program to the disabled, include podiatrists' services, add out-patient drugs to Plan B, and authorize that billing for services of hospital-based physician specialists be put back under hospitals.

Sen. Russell B. Long, (D., La.), chairman of the Senate Finance Committee which handles medicare and medicaid legislation, is pushing a proposal designed to get physicians to prescribe drugs by generic terms for patients under federally-aided medical programs. Such an amendment died in a conference committee in the final days of the last Congress.

Amendments to limit federal expenditures under medicaid (Title XIX) are expected to get early consideration by the House Ways and Means Committee. The committee reached agreement on such legislation shortly before adjournment last year, but it was too late to get it through Congress.

Deming, Kahn Named To Facilities Board

Two more Michigan physicians have been appointed to the Michigan Health Facilities Planning Council.

The new members are Richard Deming, M.D., Jackson, and David Kahn, M.D., Lansing. They join D. Bonta Hiscoe, M.D., Lansing, already a member of the Council. Dr. Deming and Dr. Kahn will each serve three-year terms.

BREAKING NEWS

Continued from Page 1092

Two More Cited For Viet Help

Two Michigan physicians on Nov. 15, were presented AMA Awards of Merit and Commendation for their services to the South Vietnamese people as part of a joint project by the AMA and the United States Government. They are Hugh T. Caumartin, M.D., and Hugh L. Sulfridge, Jr., M.D., both of Saginaw.

Presenting the plaques at the November meeting of the Saginaw County Medical Society was Jack Brown, Field Service Representative for the AMA.

Only two other Michigan physicians have received the commendation. Hira E. Branch, M.D., Flint, and Alfred B. Swanson, M.D., Grand Rapids, were given the awards last spring.

The plaques are inscribed as follows:

"This certificate which is signed by AMA President Charles Hudson states that it is being given in recognition of the meritorius service performed for the medical profession, the United States Government, and the people of South Vietnam by treating the ill and injured during your volunteer medical mission in South Vietnam."

ALLEN PARK — William J. Jones, M.D., Allen Park, is the new president of the National Kidney Foundation, elected at the annual meeting in Washington, D.C. Dr. Jones earned M.A. and Ph.D. degrees from Ohio State University and his M.D. degree at Syracuse University.

PG Series Closes At Midland

The usual large turnout of physicians at Midland, Nov. 17 completed the fall series of 18 programs by the MSMS Committee on Postgraduate Medical Education for MSMS members.

Several years ago, the Committee held a pilot afternoon clinical conference at the Midland Hospital and the success there led to others across the state. Eleven were held this year with formal medical lectures in the evening for the county medical society meetings.

Novy Receives NABSP Award

The Distinguished Service Award of the National Association of Blue Shield Plans was presented to Robert L. Novy, M.D., Detroit, Michigan Blue Shield president emeritus, at the national Blue Shield program conference October 10 in Chicago. Accepting the award for Dr. Novy was John M. Wellman, M.D., Lansing, Blue Shield president.

Dr. Novy was also recognized for his outstanding service in organizing Michigan Blue Shield by the 1962 MSMS House of Delegates, which awarded him one of its first Certificates of Commendation.

TB Group Seeks to Keep Rating as Pacemaker

The Michigan Tuberculosis and Respiratory Disease Association officals are eager to continue the excellent Michigan record in Christmas Seal sales. Michigan is a pacemaker. No other state can rival Michigan's sustained percentage of increase during the past five years.

Classified Advertising

$2.50 per insertion of fifty words or less, with an additional five cents per word in excess of fifty.

ANTED: Locum Tenens for General Practice for July and or August 1967. Guarantee of $2,000 per month, plus commission. Will furnish residence. Must have Michigan License and ref-rences. Reply: F. W. Balice, M.D., 128 E. Butler Street, Adrian, Michigan.

YCHIATRIC RESIDENCIES — Positions available January and July 1967. Fully approved; balanced didactic and linical program. Three programs from which to choose; Three-Year Program, $8,352 to $9,500; Five-Year Career Program, $9,500 to $17,184; N.I.M.H. General Practitioner stipends, $12,000. Located in Michigan's Water Winter Wonderland. Contact Dr. Paul Kauffman, Director of Training, Traverse City State Hospital, Traverse City, Michigan. An equal opportunity employer.

OR LEASE — New section of medical building. Ample parking. Suburban Grand Rapids — excellent location. Phone Grand Rapids GLendale 3-3111.

NERAL SURGEON: Interested in group or solo practice in a community that needs a surgeon. Available uly 1967. Military obligation fulfilled. Have had prior general practice experience before entering residency. Would prefer upper or middle portion of lower peninsula. Reply Box # 37, 120 W. Saginaw Street, East Lansing, Michigan.

OCTORS WANTED—Most attractive opportunity, modern building, with X-ray, by non-profit organization. Room for 1 to 4 doctors. School population 8600, up 600 to 800 per year. Reply: Waldo C. Proctor, Secretary, or Elmer Conrad, President, Dr. O. R. MacKenzie Clinic, P.O. Box 164, Walled Lake, Michigan 48088.

EXCEPTIONAL OPPORTUNITY: Practice available in proven growth area located in heart of fishing and hunting country mid-Michigan. Office of recently deceased physician, fully equipped incl. X-ray, in small community. Presently without doctor. Ideal for 1 or 2 men. Hospital six miles. Contact: Mrs. Wm. D. Roth, 339 W. Brown St., Beaverton, Michigan. Area 517—435-7834.

"PHYSIATRIST, specialist in Physical Medicine and Rehabilitation, with many years experience in chronic disease as well as skilled nursing home activities, is interested in acting as a consultant in the geographical area of Wayne, Oakland and Macomb Counties. Kindly contact Box # 36, 120 W. Saginaw Street, East Lansing, Michigan."

INTERNAL MEDICINE AND SURGERY: (Charlevoix, Michigan—Charlevoix County, area 2) — Community of 2700 with 60,000 drawing area, offers opportunity for specialists in internal medicine and surgery. Beautiful Modern Hospital with 52 beds, located on beautiful Lake Michigan; in industrial and summer and winter resort area. A Doctor's Clinic, designed for a four-man operation, on the hospital grounds will be completed December 1, 1966. Contact: Charlevoix Hospital Board of Trustees, Charlevoix Hospital, Lake Shore Drive, Charlevoix, Michigan OR: Anne Baumgartner, Administrator, Charlevoix Hospital, Charlevoix, Michigan.

FOR SALE: Physicians office building and basic equipment, examining tables, desks, etc. Suitable for one or two physicians. Write: Richard G. Barstow, M.D., 429 N. Center Street, Gaylord, Michigan.

WANTED: Surgical resident for a locum tenens for months of January, February, and/or March, 1967. Contact: Don F. Kudner, M.D., 766 W. Michigan Ave., Jackson, Michigan.

POSITION WANTED: Internist, foreign graduate, age 33, willing to do some G.P.; seeks association in southern Michigan. Reply Box #38, 120 W. Saginaw Street, East Lansing, Michigan.

NEWBERRY in need of General Practitioner and a surgeon. Population including surrounding area about 5,000. Excellent schools, churches of all denominations. Hospital opened February 1966. An extended care facility is being made available in former hospital building. Newberry is a paradise for a fisherman or hunter. Contact: Administrator, Tahquamenon General Hospital, Newberry, Michigan.

POSITION WANTED: Board eligible Internist now completing one year Hematology training is interested in association, in Detroit vicinity. U. of M. Grad. All university training, Michigan license, military obligation completed. Kenneth Tucker, M.D., 3078 Wilce, Columbus, Ohio 43202.

WANTED: Well qualified, capable M.D., 2 years residency training desirable, to take over established general practice, 15 minutes from excellent general, open staff hospital; in growing residential community in lower Western Michigan; 70 minutes from city of 200,000. New fully equipped (if desired), office available for lease or purchase. Good hunting and fishing. Girard Veenschoten, M.D., 6 Candy Lane, 6600 W. Grand River Ave., Brighton, Michigan 48116.

PLAINWELL SANITARIUM, INC.

Plainwell, Michigan — MU 5-8441

Edwin M. Williamson, M.D.
M. Leroy Barry, M.D.

Dan W. Everett, M.D.
Wilbur R. King, Ph.D.

The Plainwell Sanitarium is a private psychiatric hospital licensed by the Michigan Department of Mental Health, and member of the American Hospital Association, Michigan Hospital Association, and National Association of Private Psychiatric Hospitals. Our extensive diagnostic treatment services include the following:

- Organic and psychological therapy for the psychiatrically and emotionally disturbed of all ages.
- Diagnostic evaluation of neurological disorders.
- Rehabilitative services for geriatric and convalescent patients.
- Medico-Legal counsel.
- Diagnostic and psychological evaluation and hospitalization, if indicated, of juveniles for Probate and Juvenile Courts.

THESE ADVERTISERS HELP MAKE MICHIGAN MEDICINE POSSIBLE

Ames Co., Inc.	Cover III
Ayerst Laboratories	1102, 1103
Burroughs Wellcome & Co.	1088
Classified Advertising	1133
Dorsey Laboratories	1128
Geigy Pharmaceuticals	1123
Hack Shoe Co.	1130
Hynson, Westcott & Dunning, Inc.	1047
Ingram Co., G.A.	1110, 1122
Kingswood Hospital	1130
Lakeside Laboratories, Inc.	1105
Lederle Laboratories	1094, 1095, 1096, 1097, 1111, 1119, 1131
Lilly, Eli and Co.	1060
Medical Protective	1124
Mercywood Hospital	1129
Merrell	1116, 1117
Noble-Blackmer, Inc.	111
Parke, Davis & Co.	Cover
Pitman-Moore Division, Dow Chemical Co.	10 1112, 111
Plainwell Sanitarium	11
Professional Management	11
Robins Co., Inc., A.H.	1107, 11
Roche Laboratories	Cover
Searle	1093, 1126, 11
Smith Kline & French Laboratories	10
Squibb	1101, 1115, 11
Stratton, Ben P.	10
Syntex Laboratories	1053, 1054, 10 1056, 10
Tutag, S.J. & Co.	111
Warner-Chilcott Laboratories	1120, 11
Winthrop Laboratories	10
Wyeth	1086, 10

PROFESSIONAL MANAGEMENT · FOR PHYSICIANS AND DENTISTS · PM®

since 1932

Professional Management

BLACK AND SKAGGS ASSOCIATES
Affiliated Offices

Battle Creek - - - Detroit
Grand Rapids - - - Saginaw
Traverse City - - - Berkley

"SERVING THE MICHIGAN PHYSICIAN FOR OVER 30 YEARS"

Index To
Michigan Medicine, 1966, Volume 65

Published by the Michigan State Medical Society

© 1966 by
Michigan State Medical Society

(The Index lists the many original articles carried during 1966 along with a listing of the author; and also lists such other reference material as the MSMS President's Pages, the Editorials, Legal Opinions and In Memoriam. Readers wishing to find specific articles about MSMS activities, socio-economic matters, etc., may write to the Managing Editor, Michigan Medicine, 120 West Saginaw, East Lansing, Michigan 48823 for specific assistance.)

Index to Authors Of Original Articles

Alexander, L. C., 265
Allaben, Robert D., 457
Anderson, Robert W., 17
Axelrod, Mildred A., 831
Axelrod, Robert G., 831

Bacher, Burton, 718
Ballantyne, Lynne M., 17
Bates, Richard C., 449
Berger, Margaret E., 953
Berkas, Ernest M., 838
Betts, Joseph S., 725
Bigman, Oscar, 953
Bracht, Neil F., 1061

Campbell, Colin, 621
Carpenter, William S., 457
Castle, Maurice E., 100
Cerny, Joseph C., 713
Child, Charles G. III, 454
Cohen, Carl, 362
Cohn, S. Leonard, 829, 1069
Connolly, Paul J., 457
Combs, Robert G., 627
Cretens, Mary L., 191
Crussi, F. Gonzales, 627

Dal Santo, Gianfranco, 261
De Kornfeld, T. J., 359
Dobie, Shirley, 1071
Dodge, H. J., 189
Doshi, B., 265

Eckhous, Arthur S., 718
Engelke, Otto K., 189
Espelding, Pauline, 100
Evans, Lester J., 817

Firschild, Paul G., 97
Floyd, William S., 829, 1069
Friedman, Arnold P., 185

Gans, Robert I., 542
Gardner, Ernest D., 529
Giles, C. L., 183
Goodsell, John O., 275
Greene, James A., 713
Greene, James A. Jr., 271, 949
Gros, Gerard, 949
Gurol, Feridun, 22, 720
Gustafson, David C., 459

Hardwick, C. T., 844
Harryman, James E., 463
Hart, Zwi H., 634
Hashimi, Ali Ahmad, 831
Hubbard, W. N. Jr., 179
Huelke, D. F., 25
Hunt, Andrew D. Jr., 1061

Iung, Omero S., 627

Jack, William W., 463
Jackson, Franklin R., 838
Jaffe, Robert B., 621
Johnson, Aran S., 718
Johnson, Arthur J., 820

Kain, Thomas R., 261
Kilar, Theodore W., 459
Knoblich, Roman, 105

Lalli, A. F., 25
Lapco, Leon, 271
Lazar, Morton R., 33
Leach, James R., 820
Lerner, Leonard H., 542
Levitt, Morton, 529
Lien, Donna M., 111
Lillie, Helen, 868
Limia, Anthony, 718
Lindenauer, S. Martin, 454
Llinas, Jose J., 965
Lowinger, Paul, 1071
Luby, Elliot D., 955

Mangan, W. Fred, 858
Meade, William H., 627
Meriney, David K., 624
Meyers, Marjorie Peebles, 718

Newitt, Arthur W., 980
Nolke, Anthony, 634

Oberman, Harold A., 111
Odeku, Latunde, 533
Olejniczak, Stanley, 1067

Patterson, Paul R., 962
Potter, Edith L., 194

Rhoads, Paul S., 115
Ross, C. Howard, 278

Sander, Charles H., 1076
Schaefer, R. L. Jr., 265
Schneider, Richard C., 533
Schorer, C. E., 1071
Schwimmer, Benjamin, 837
Scott, Gordon H., 529
Simpson, William F., 634
Simson, Laurence R., 111
Snider, Eugene A., 33
Stimson, Cyrus W., 634
Stocker, Lawrence L., 542

Thiesen, N. J., 367
Thompson, George R., 17
Turcotte, Jeremiah G., 713

Wardock, Mohammad Omar, 831
Weiss, Morris, 27
Weller, John M., 271, 949
Whitehouse, Walter, 621
Work, Bruce, 621

Ziel, Hermann A., 545

INDEX TO VOLUME 65

Original Papers

A

"Active" tuberculosis contacts a guide in tuberculosis control. Oscar Bigman, M.D., and Margaret E. Berger, 953

Acute fatal thrombocytopenia occurring with clinical rubella. Charles H. Sander, M.D., 1076

Acute hemolytic anemia complicating infectious mononeucleosis. Feridun Gurol, M.D., 22

B

Barium enema study with the rocking method. N. J. Thiesen, M.D., 367

Bleeding gastric carcinoid: A rare condition. Paul J. Connolly, M.D., William S. Carpenter, M.D., and Robert D. Allaben, M.D., 457

C

Cervical spondylosis with neurologic deficit. E. Latunde Odeku, M.D., and Richard C. Schneider, M.D., 533

Complete rupture of the term gravid uterus with a delay before hysterectomy—Two case reports. Theodore W. Kilar, M.D., and David C. Gustafson, M.D., 459

Congenital malformations with special reference to cysts in the kidneys. Edith L. Potter, M.D., 194

Control of infectious syphilis in Detroit. Benjamin Schwimmer, M.D., 837

Cordan and synalar—total body occlusive dressings. Carl Cohen, M.D., 362

Current status of renal transplantation. Jeremiah G. Turcotte, M.D., Joseph C. Cerny, M.D., and James A. Greene, M.D., 713

D

Diagnosis and differential diagnosis of migraine and muscle contraction headache. Arnold P. Friedman, M.D., 185

E

Early strategies in the treatment of the alcoholic. Jose J. Llinas, M.D., 965

Educating tomorrow's physicians. Morton Levitt, Ph.D., Gordon H. Scott, Ph.D., and Ernest D. Gardner, M.D., 529

Effects of intra-venous diazoxide, a non-diuretic thiazide, upon blood pressure, electrolyte, and uric acid excretion. George R. Thompson, M.D., Robert W. Anderson, M.D., and Lynne M. Ballantyne, 17

Employment of low hyperbaric therapy in management of leg ulcers. Stanley Olejniczak, M.D., 1067

Epidemiological identification of urban point sources of histoplasmal infections in two Michigan communities. H. J. Dodge, M.D., and Otto K. Engelke, M.D., 189

Experience with dissecting aortic aneurysm in a small general hospital. B. Doshi, M.D., L. C. Alexander, M.D., and R. L. Schaefer, Jr., M.D., 265

F

Fracture of the patella forty-four years later. John O. Goodsell, M.D., 275

G

Glaucoma and conjunctival foreign bodies. C. L. Giles, M.D., 183

H

Hand-Schuller-Christian disease and pregnancy. William S. Floyd, M.D., F.A.C.O.G., and S. Leonard Cohn, M.D., F.A.C.O.G., 1069

Hepatomegaly with progressive liver failure in Afghanistan. Robert G. Axelrod, M.D., and Mildred A. Axelrod, M.D., Ali Ahmad Hashimi, M.D., and Mohammad Omar Wardock, M.D., 831

Histoplasmin survey. Delta County, Michigan. Mary L. Cretens, M.D., 191

Hydatidiform mole in an older woman. Morton R. Lazar, M.D., and Eugene A. Snider, M.D., 33

Hypofibrinogenemia: Its diagnosis and treatment in the obstetric patient. Joseph S. Betts, M.D., 725

I

Identification of human remains. D. F. Huelke, Ph.D., A. F. Lalli, M.D., 25

J

John Morgan, M.D. C. Howard Ross, M.D., 278

L

Life planning should begin early. W. Fred Mangan, 858

M

M.S.M.S. Healthmobile "sells" careers. Helen Lillie, 863

Management of severe erythroblastosis in utero. Robert B. Jaffee, M.D., Bruce Work, M.D., Colin Campbell, M.D., and Walter Whitehouse, M.D., 621

Medical education and the community. Andrew D. Hunt Jr., M.D., and Neil F. Bracht, M.A., M.P.H., 1061

Medicine as a social institution. Lester J. Evans, M.D., 817

Meeting ground of psychiatry and religion. Paul S. Rhoads, M.D., 115

Michigan maternal mortality study—A 15-year survey. Hermann A. Ziel, M.D., 545

Multiple atheromatous embolization after aortic surgery. F. Gonzales Crussi, M.D., Omero S. Iung, M.D., Robert G. Combs, M.D., and William H. Meade, M.D., 627

O

Ocular toxicity of chloroquine. Leonard H. Lerner, M.D., Lawrence L. Stocker, M.D., and Robert I. Gans, M.D., 542

On the nature of memory. Elliot D. Luby, M.D., 955

Origins of the great American society. C. T. Hardwick, Ph.D., 844

P

Pathologic (so-called spontaneous) rupture of spleen in leukemia and lymphoma. Roman Knoblich, M.D., 105

Pediatric diagnostic methods in adult urology. Arthur J. Johnson, M.D., and James R. Leach, M.D., 820

Plasmapheresis: An innovation in procurement of blood components. Laurence R. Simson, M.D., Donna M. Lien, M.T., and Harold A. Oberman, M.D., 111

Psychological principles in the management of the physically ill adolescent. Morris Weiss, M.D., 27

R

Real effect of imipramine isocarboxazid and nialamide. C. E. Schorer, M.D., Paul Lowinger, M.D., and Shirley Dobie, Ph.D., 1071

Repair of bile duct strictures. Charles G. Child III, M.D., and S. Martin Lindenauer, M.D., 454

Respiratory and cardiac resuscitations. Thomas R. Kain, M.D., and Gianfranco Dal Santo, M.D., 261

Restrictive pericarditis: A new complication of the Beck I procedure. David K. Meriney, M.D., 624

Review of narcotic and non-narcotic analgesics. T. J. De Kornfeld, M.D., 359

Revolution in science and the response of the church. W. N. Hubbard, Jr., M.D., 179

Role of the kidney biopsy in modern medicine, James A. Greene Jr., M.D., Leon Lapco, M.D., and John M. Weller, M.D., 271

S

Sex education of the adolescent: How? Where? When? Paul R. Patterson, M.D., 962

Simple splint for the emergency room. Maurice E. Castle, M.D., and Pauline Espelding, R.N., 100

Study of susceptibility and immunity to measles. Arthur W. Newitt, M.D., M.P.H., 980

Successful pregnancies in patients with prosthetic mitral valves. Aran S. Johnson, M.D., Marjorie Peebles Meyers, M.D., Arthur S. Eckhous, M.D., Burton Bacher, M.D., and Anthony Limia, M.D., 718

Surgical treatment of massive pulmonary embolism. Paul G. Firschild, M.D., 97

T

Transthoracic vagotomy for recurrent peptic ulcers. Franklin R. Jackson, M.D., and Ernest M. Berkas, M.D., Ph.D., 838

Treatment of alcoholism in a general hospital. Richard C. Bates, M.D., 449

Two articles about maternal health committees. William W. Jack, M.D., and James E. Harryman, M.D., 463

U

Use of Furosemide, a new oral diuretic, in the nephrotic syndrome. Gerard Gros, M.D., James A. Greene, Jr., and John M. Weller, M.D., 949

Use of the intravenous tolbutamide test. Feridun Gurol, M.D., 720

Uterine rupture in labor following repair for cervical incompetence. S. Leonard Cohn, M.D., and William S. Floyd, M.D., 829

X

XO/XY mosaicism in a profoundly retarded male. Zwi H. Hart, M.D., Cyrus W. Stimson, M.D., William F. Simpson, M.S., and Anthony Nolke, M.D., 634

President's Page

Community health, 508

County Medical Society, 596

Doctors are citizens, 680

Every week is Brotherhood Week, 76

Good prescription, 160

How would you change graduate medical education?, 917

Medicine's challenges today, 795

Preliminary analysis of medicare, 1051

Three closing thoughts, 790

Time for MAP congress and legislative work, 422

Two invitations, 328

Editorials

Adios, C. J. Tupper, M.D., 35
Advertisements worth reading, 745
Any number can play, Robert E. Rice, M.D., 653
Are we on the same wave length?, Mrs. Rufus H. Reitzel, 384

Be on alert, 35
Big shoes to fill, B. M. Harris, M.D., 125
Blues and medicare, W. H. Huron, M.D., 381

Changing world and practice of medicine, Harry A. Towsley, M.D., 649
Commentary on tests of thyroid function, George H. Lowrey, M.D., 1098
Continuing education, James J. Lightbody, M.D., 288

Different in U.S.A., 35

Eighteen big months, Frank C. Coleman, M.D., 471

Fine proposal, 746

Growth hormone problem, G. H. Lowrey, M.D., and G. E. Bacon, M.D., 649

How would you answer these Michigan issues?, 986

It's the mark of a professional, 471

Law day, John S. Clark, 381
Lest we forget, RE Traffic toll, 745

Nine leaders, 291
Noted and Quoted, William F. Schwartz, 471

On giving them what they want, Dean P. Carron, M.D., 285
On to Las Vegas, A.M.A. President Hudson, 855
Only the wealthy? No!, 855
Opinions wanted, 130

Plea for brevity, George H. Lowrey, M.D., 381
Profit and loss, 205

Science Language, 746
Self renewal, Robert D. Calkins, 290
Separate Billing by hospital specialists, Ben R. Van Zwalenburg, M.D., 285
Sneaky double crosser, Dean P. Carron, M.D., 201
Study of extern system urges, 557
Suggests role for M.D. in sex education, Benjamin Jeffries, M.D., 855

Thanks "Goldie", 557
Time to ask, W. C. C. Cole Jr., M.D., 747
Toward good care at reasonable costs, Robert P. Gerholz, 125

Urges higher morale, James Z. Appel, M.D., 128
Urges physicians again to use seat belts, Paul W. Gikas, M.D., 984

Vital issues, 128
Voluntary way, Governor George Romney, 205

Warning, Milford O. Rouse, M.D., 557
We must inform, C. Joseph Stetler, 201
We'll miss "Bill", B. M. Harris, M.D., 745
Will physicians roll with the punch?, Robert J. Mason, M.D., 288
Who is practicing medicine, Theodore G. Klumpp, M.D., 984

Abstracts of M.S.M.S Council Action

Meeting of November 3, 1965; 14

Meeting of December 15, 1965; 88

Meeting of February 2, 1966; 247

Meeting of March 16, 1966; 348

Meeting of April 20, 1966; 436

Meeting of May 18, 1966; 527

Legal Opinions

y re follow-up reporting to Department of Health, 402

orts of screening program findings, 584

e statute of limitations, 210

In Memoriam

A

s, Thomas G., 888; Anderson, James O., 705

B

r, George J., 1052; Bagley, Ulysses Simpson, 440; ard, Milner S., 705; Barnwell, John Blair, 587; Becker, ph W., 888; Bennett, Arthur K., 937; Bien, Walter 259; Blodgett, William E., 664; Bond, George L., 705; nard, Clifford W., 587; Brown, Henry S., 259; Brue- Oscar H., 440

C

kins, Edwin A., 888; Canter, Gayle E., 410; Chajes, ard, 1052; Chapman, Thomas H., 440; Conkle, Guy 705; Cortopassi, Andre J., 222; Curhan, Joseph H., 1052

D

gler, Charles R., 588; Domzalski, Casimer A., 888; ald, Douglas, 888; Dubnove, Aaron, 222.

E

ott, Bruce R., 410; Estill, E. V., 705

F

guson, Lynn A., 410; Fisher, Ralph Lee, 411; Frazer, ry Margaret, 1052; French, Horace L., 664

G

enger, Stephen M., 1052; Gething, Joseph W., 68; ens, Donovan H., 132; Glassman, Samuel, 440; Gold- , Ruth Berkman, 411; Gordon, John Whillock, 440; enidge, Robert I., 440

H

milton, J. Gregory, 132; Hanft, Cyril F., 664; Harrell, s, 588; Hennes, Allen R., 68; Hermes, Edgar J., 1058; kner, Lawrence P., 259; Hyland, Wm. A., 641

J

Jones, Adrian R., 888

K

Kennedy, Charles S., 937 Kercher, Ervin F., 442; Kernkamp, Ralph F., 132; Kimball, Arthur S. Jr., 411; King, Robert R., 588

L

Lapham, Landon, 705; Lavender, Howard C., 705; Love, W. Thomas, 706

M

Mac Gregor, John R., 68; Margrave, Edmund D. Sr., 888; Mateer, John G., 937; Mitton, Orland W., 937; Montgomery, John C., 888; Murphy, William M., 411

N

Nelson, Robert E., 132

O

Oakes, Ellery, A., 411; Organ, Fred W., 588

P

Parker, Albert R., 222; Peterman, Earl, 68; Pollok, Donald A., 412; Prall, Harry J., 442

R

Raiford, Frank P., 412; Randall, O. M., 706; Reed, H. Walter, 709; Ribeilima, Jose, 938; Rice, Franklyn, 709; Roeglin, Orville, 709; Rozan, Josef S., 133; Rupp, Jacob R., 666

S

Savignac, Eugene M., 888; Schlacht, George F., 442; Schwocho, Niles H., 1058; Smith, W. Joel, 709; Snyder, Charles E., 938; Southwick, Wayne, 1058; Springer, Russell A., 938; Stewart, Lula Belle, 70; Sturgis, Cyrus C., 588; Sugar, David, 710; Szmigiel, Alexander, 888

T

Taylor, Ivan B., 710; Toothaker, Kenneth, 133; Toshach, Clarence E., 938; Tucker, Harold A., 710

V

Van Schoick, John D., 666

W

Warner, Peter L., 710; Wedel, Herbert, 70; Weller, Charles N., 938; Wenger, John N., 940; Wilson, William E., 710; Wisdon, Inez R., 133; Wollank, Helen Wilson, 588; Woods, James J., 1058; Wruble, Joseph, 223

Personal Mention

Sixty years of medical service to Caledonia by Guy D. Houghton, M.D., were described in a recent feature story in the Southkent *News* and the Wyoming *Advocate*. The article quoted some of Dr. Houghton's amusing stories about his early years as a physician.

* * *

John W. Moses, M.D., Detroit, has been elected to the board of directors of the Kenny Rehabilitation Foundation. Dr. Moses has served on the Kenny Medical advisory board for many years.

* * *

Coleen Haberstroh, M.D., Midland, spoke at the Michigan Child Study Association's annual conference held recently at Central Michigan University. Dr. Haberstroh conducted an instructional session on "Venereal Disease — A Menace in Michigan."

* * *

A participant in a Panel on Infectious Diseases at the 24th Annual Conference of the American Association of Industrial Nurses held in Detroit was A. Martin Lerner, M.D., Detroit. During the past summer Dr. Lerner chaired a program on "Chemotherapy of Infections" at the Royal Northern Hospital in London.

* * *

Hira E. Branch, M.D., Flint, recently attended a meeting of the Societe Internationale de Orthopedia at Traumatologne in Paris. Mrs. Branch accompanied him there and on a trip to Geneva following the convention.

* * *

Donald J. Birmingham, M.D., Detroit, spoke on the "Dermatologic Aspects of Natural and Artificial Light Sources in Industry" at the Pittsburgh meeting of the American Industrial Health Conference. In New York for the Eastern Allergy Forum held at Grossinger's, Dr. Birmingham's talk was on "Sensitizers in the Home."

Thomas Hamilton, M.D., has begun his duties as health director of Lenawee County. Dr. Hamilton, formerly assistant medical director at Rutgers University, replaces Eleanor Skufis, M.D., Adrian, who resigned last year.

* * *

Willis Hasty, M.D., Shelby, was reappointed recently to the Shelby Community Hospital Board of Directors for a five-year term. Dr. Hasty also serves as an alternate delegate from the Oceana County Medical Society to the MSMS House of Delegates.

* * *

A. H. Hirschfeld, M.D., Detroit, has been appointed Consultant to the Director, Bureau of Disability Insurance, U. S. Social Security Administration.

* * *

The new, $100,000, all-purpose community center and park at Edenville has been named the Lafayette and Hannah L. Swanton Memorial Building in memory of Dr. Swanton, who died in 1956 at his Edenville area farm. A former mayor of Traverse City, Dr. Swanton had directed the trustees of his estate to set up a trust in perpetuity for the educational, social, religious and cultural activities of the Edenville people. After six years of deliberation, the court directed that the center and park be built with a portion of the estate funds.

Elmer B. Miller, M.D., Pleas
Ridge, recently spoke at the
mel, California, meeting of
Frederick A. Coller Surgical
ciety. Doctor Miller's subject
"Prophylactic Cobalt Therapy
lowing Radical Mastectomy
Carcinoma of the Breast."

* * *

A recent story in the Gr
Rapids *Press* featured Myrtle
Lain, M.D., an intern at St. Ma
Hospital. The article praises I
tor McLain for her productive
as mother and physician, and
her courage in leaving her jol
chemical engineer with Gen
Motors to enter medical sch
Upon completion of her int
ship, she plans to open practic
a general practitioner.

* * *

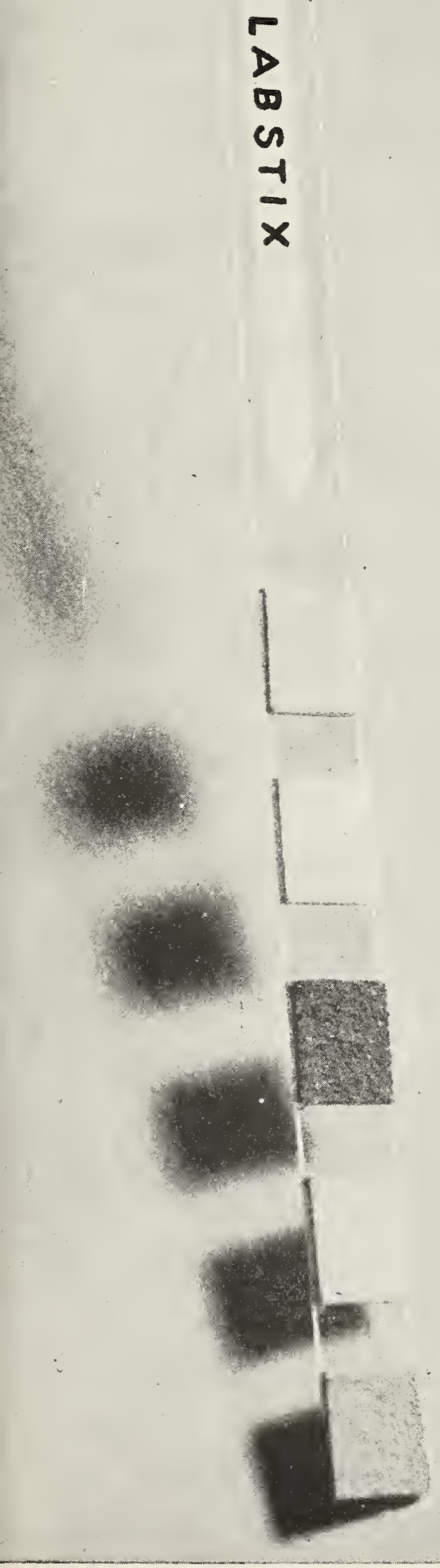
Recently appointed Chairma
the Department of Medicine
Henry Ford Hospital is Richm
W. Smith, Jr., M.D., Detroit.
announcement of Dr. Smith's
position was made by James
Howell, M.D., Detroit, execu
director of the hospital.

* * *

The Commonwealth Fund
awarded $6,065 to William Ma
M.D., Ann Arbor, U-M assoc
professor of radiology, for tr
to Israel to collect data on a
form of arthritis which is fo
there. He will also lecture at
University of Tel Aviv. The
iologist plans to visit medical
ters in England, Norway, Swe
Holland and Denmark, as wel
the United States. The grant
will pay part of the cost of wri
a textbook on the radiolog
diagnosis of arthritic diseases.

* * *

Eli M. Brown, M.D., Hunt
ton Woods, attended the First
ternational Symposium on Ir
venous Regional Anesthesia
at Holy Cross College where
spoke on "Prolonged Intraver
Regional Anesthesia."



new from Ames
5 basic uro-analytical facts in 30 seconds

Labstix®

BRAND REAGENT STRIPS

...broadest urine screening possible from a single reagent strip

Urine test results with Labstix Reagent Strips can represent significant guides to differential diagnosis or therapy in many conditions. An unexpected "positive" may enable you to detect hidden pathology—long before more recognizable symptoms become evident. Negative results, which permit you to rule out abnormalities in a broad clinical range, can serve as baseline values for reference in future examinations. The 5 colorimetric test areas encompassed on Labstix Reagent Strips are:

pH—values are read numerically in the essential range of pH 5 to pH 9.

Protein—results are read either in the "plus" system or in mg. % in amounts approximating "trace," 30, 100, 300, and over 1000 mg. %.

Glucose—provides a "Yes-or-No" answer for urine "sugar spill."

Ketones—detects ketone bodies in urine—**both** acetoacetic acid and acetone. Reacts with as little as 5 to 10 mg. % of acetoacetic acid.

Occult Blood—specific test for intact red cells, hemoglobin or myoglobin. Results are read as negative, small, moderate or large amounts.

Now a Clear Reagent Strip of Firm Construction

...facilitates handling during testing procedure. Excellent color contrast made possible by the clear plastic strip, together with the clearly defined color charts provided, permits precise, reproducible colorimetric readings in all 5 test areas. A more definitive interpretation of uro-analytical facts is made possible.

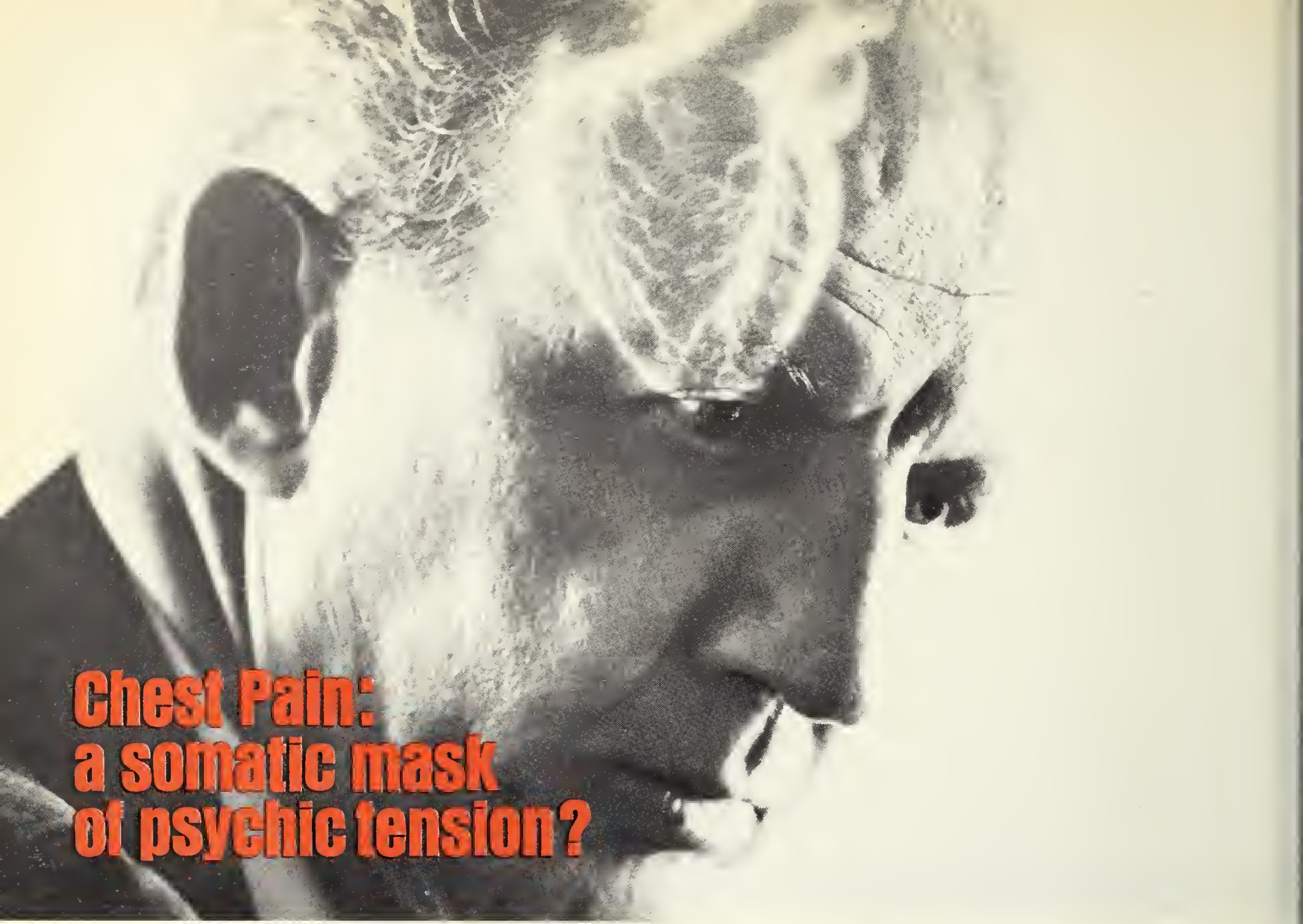
Available: Labstix Reagent Strips, bottles of 100 (color charts are supplied with each bottle).

AMES

Ames Company, Inc., Elkhart, Indiana

AMES

08165



"Heart symptoms"—chest pain, tachycardia, arrhythmia—invariably alarm and preoccupy the patient, though they may be completely without organic basis. Such symptoms often are somatic masks of psychic tension, arising from constant encounters with stressful situations.

When the problem is diagnosed as emotionally produced, consider Valium (diazepam) as adjunctive therapy. Valium (diazepam) acts rapidly to calm the patient, to reduce his psychic tension and relieve associated cardiovascular complaints.

NEUROTIC FATIGUE—the chronic tiredness resulting from emotional strain which so often accompanies psychogenic "heart" symptoms—also can be alleviated by this highly useful agent. Valium (diazepam) often achieves results where other psychotherapeutic agents have failed.

Valium (diazepam) is generally well tolerated, and usually does not impair mental acuity or ability to function. If side effects such as ataxia and drowsiness occur, they usually disappear with dosage adjustment.

Contraindications: Infants, patients with history of convulsive disorders or glaucoma.

Warning: Not of value in the treatment of psychotic patients, and should not be employed in lieu of appropriate treatment.

Precautions: Limit dosage to smallest effective amount in elderly patients (not more than 1 mg, one or two times daily) to preclude ataxia or oversedation. Advise patients against possibly hazardous procedures until correct maintenance dosage is established; driving during therapy not recommended. In general, concurrent use with other psychotropic agents is not recommended. Warn patients of possible combined effects with alcohol. Safe use in pregnancy not established. Observe usual precautions in impaired renal or hepatic function and in patients who may be suicidal; periodic blood counts and liver function tests advisable in long-term use. Cease therapy gradually.

Side Effects: Side effects (usually dose-related) are fatigue, drowsiness and ataxia. Also reported: mild nausea, dizziness, blurred vision, diplopia, headache, incontinence, slurred speech, tremor and skin rash; paradoxical reactions (excitement, depression, stimulation, sleep disturbances and hallucinations) and changes in EEG patterns. Abrupt cessation after prolonged overdosage may produce withdrawal symptoms similar to those seen with barbiturates, meprobamate and chlordiazepoxide HCl.

Dosage — Adults: Mild to moderate psychoneurotic reactions, 2 to 5 mg b.i.d. or t.i.d.; severe psychoneurotic reactions, 5 to 10 mg t.i.d. or q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hrs, then 5 mg t.i.d. or q.i.d. as needed; muscle spasm with cerebral palsy or athetosis, 2 to 10 mg t.i.d. or q.i.d. Geriatric patients: 1 or 2 mg/day initially, increase gradually as needed.

Supplied: Tablets, 2 mg, 5 mg and 10 mg; bottles of 50 for convenience and economy in prescribing.

Roche Laboratories Division of Hoffmann-La Roche Inc.
Nutley, N.J. 07110

for somatic symptoms of psychic tension

Valium® • **2-mg, 5-mg, 10-mg tablets**
(diazepam)

ROCHE

LMichigan Medicine

DIRECTORY ISSUE

U.C. MEDICAL CENTER LIBRARY
DEC 16 1966

NOVEMBER, 1966 SECTION TWO

MICHIGAN MEDICINE

MICHIGAN STATE MEDICAL SOCIETY

THE MICHIGAN STATE MEDICAL SOCIETY

Sponsors the
Following Insurance Plans

Disability

This plan has recently been materially improved by providing guarantees as to renewal in the event the master policy is terminated for any reason or if the individual's membership in MSMS is discontinued.

Lifetime Accident

Sickness for 5 years or to Age 65

Benefits to $500 monthly

Life

Group Term up to $10,000

Group Permanent

Family Plan up to $30,000 with $5,000 for each dependent

Special Accident

Death and Dismemberment up to $100,000

Annual Premium rate is only 72c per $1,000

Spouse may also be covered

Professional Overhead Expense

Premiums are tax deductible

Pays up to 2 years

Amounts available up to $1500 monthly

For information concerning any of the above insurance plans, call or write

Ben P. Stratton Agency, Inc.
Administrator
P. O. Box 547
Lansing, Michigan 48903
Area Code 517-484-2578

Michigan State Medical Society Directory

Members of the Michigan State Medical Society will find this 1966-67 issue of the Directory even more useful than previous issues. In addition to the several listings of the MSMS members, the new Directory includes valuable reference information about the Michigan State Medical Society, the Woman's Auxiliary to MSMS, the American Medical Association, the Michigan Foundation for Medical and Health Education, and the County Medical Societies.

The Publication Committee of The Council welcomes your suggestions for further improvements.

Table of Contents

Page

Index to County Medical Societies 2

Guide to Help Locate Cities Within the Counties 3

Michigan State Medical Society Officers 5

The Council 5

Executive Committee of The Council 5

MSMS Staff 6

Michigan Foundation for Medical and Health Education 6

MSMS Delegates to AMA 7

Section Delegates to AMA 7

MSMS Delegates and Alternates for 1966 House of Delegates 8

MSMS Section Officers 13

Committees of the Society 14

Committees of The Council 21

Committees of the House of Delegates 25

Officers of MSMS County Medical Societies 26

County Society Bulletin Editors 30

County Medical Society Executive Secretaries 30

Woman's Auxiliary to MSMS 31

County Auxiliary Presidents 33

American Medical Association 34

Directory of Members by County Societies 35

Alphabetical Directory of Members 89

Published monthly, except two extra issues to be published in November and January, by the Michigan State Medical ciety as its official journal. Second class postage paid at Lansing, Michigan. Office of publication, 200 N. Cedar St., Lansing, ich. 48901. Yearly subscription rate, $9.00; single copies, 80 cents. Additional postage: Canada, $1.00 per year; Pan-American ion, $2.50 per year; Foreign, $2.50 per year. Printed in USA. **All communications** relative to manuscripts, advertising, news, changes, subscriptions, change of address, etc., **should be addressed to Publications Committee, Michigan State Medical ciety,** 120 West Saginaw Street, East Lansing, Michigan 48824. © 1966 Michigan State Medical Society. Phone: Area Code 7, 337-1351.

Michigan State Medical Society Directory

CONTENTS

This Directory lists the membership of each component medical society and therefore the total membership of the Michigan State Medical Society. For more effective reference use, the directory also contains an alphabetical list of all MSMS members, with a reference to both the page number and the county society code number.

	County Code	Page
Alcona County (Alpena-Alcona-Presque Isle	14	35
Alger County (Marquette-Alger)	134	54
Allegan County	10	35
Alpena County (Alpena-Alcona-Presque Isle)	14	35
Antrim (Northern Michigan)	170	57
Arenac (Bay-Arenac-Iosco)	22	36
Baraga County (Houghton-Baraga-Keweenaw)	82	43
Barry County	18	35
Bay County (Bay-Arenac-Iosco)	22	36
Benzie County (Grand Traverse-Leelanau-Benzie)	70	42
Berrien County	26	36
Branch County	30	37
Calhoun County	34	37
Cass County	38	38
Charlevoix County (Northern Michigan)	170	57
Cheboygan County (Northern Michigan)	170	57
Chippewa County (Chippewa-Mackinac)	42	38
Clare County (Gratiot-Isabella-Clare)	74	42
Clinton County	46	38
Crawford (North Central Counties)	150	55
Delta County (Delta-Schoolcraft)	50	39
Dickinson County (Dickinson-Iron)	54	39
Eaton County	58	39
Emmet County (Northern Michigan)	170	57
Genesee County	62	39
Gladwin (North Central Counties)	150	55
Gogebic County	66	41
Grand Traverse County (Grand Traverse-Leelanau-Benzie)	70	42
Gratiot County (Gratiot-Isabella-Clare)	74	42
Hillsdale County	78	42
Houghton County (Houghton-Baraga-Keweenaw)	82	43
Huron County	86	43
Ingham County	90	43
Ionia County (Ionia-Montcalm)	94	45
Iosco County (Bay-Arenac-Iosco)	22	36
Iron County (Dickinson-Iron)	54	39
Isabella County (Gratiot-Isabella-Clare)	74	42
Jackson County	98	45
Kalamazoo County (Kalamazoo Academy of Medicine)	102	46
Kalkaska (North Central Counties)	150	55
Kent County	106	48

	County Code	Pag
Keweenaw County (Houghton-Baraga-Keweenaw)	82	4
Lake County (Mecosta-Osceola-Lake)	142	5
Lapeer County	110	5
Leelanau County (Grand Traverse-Leelanau-Benzie)	70	4
Lenawee County	114	5
Livingston County	118	5
Luce County	122	5
Mackinac County (Chippewa-Mackinac)	42	3
Macomb County	126	5
Manistee County	130	5
Marquette County (Marquette-Alger)	134	5
Mason County	138	5
Mecosta County (Mecosta-Osceola-Lake)	142	5
Medical Society of North Central Counties	150	5
Menominee County	146	5
Midland County	154	5
Missaukee County (Wexford-Missaukee)	226	6
Monroe County	158	5
Montcalm County (Ionia-Montcalm)	94	4
Montmorency (North Central Counties)	150	5
Muskegon County	162	5
Newaygo County	166	5
Northern Michigan Counties (Antrim-Charlevoix-Cheboygan-Emmet)	170	5
Oakland County	174	5
Oceana County	178	6
Ogemaw (North Central Counties)	150	5
Ontonagon County	182	6
Osceola County (Mecosta-Osceola-Lake)	142	5
Oscoda (North Central Counties)	150	5
Otsego (North Central Counties)	150	5
Ottawa County	186	6
Presque Isle County (Alpena-Alcona-Presque Isle)	14	3
Roscommon (North Central Counties)	150	5
Saginaw County	190	6
St. Clair County	194	6
St. Joseph County	198	6
Sanilac County	202	6
Schoolcraft County (Delta-Schoolcraft)	50	3
Shiawassee County	206	6
Tuscola County	210	6
Van Buren County	214	6
Washtenaw County	218	6
Wayne County	222	6
Wexford County (Wexford-Missaukee)	226	6
MSMS Membership Alphebetical List		

Guide to Help Locate Cities within the Counties

his guide matches up the counties for all Michigan communities of 1,000 population or more.*

ITY and COUNTY

drian (Lenawee)
lbion (Calhoun)
lgonac (St. Clair)
llegan (Allegan)
lma (Gratiot)
lmont (Lapeer)
lpena (Alpena)
nn Arbor (Washtenaw)

ad Axe (Huron)
angor (Van Buren)
attle Creek (Calhoun)
ay City (Bay)
elding (Ionia)
elleville (Wayne)
ellevue (Eaton)
enton Harbor (Berrien)
erkley (Oakland)
errien Springs (Berrien)
essemer (Gogebic)
ig Rapids (Mecosta)
irmingham (Oakland)
lissfield (Lenawee)
loomfield Hills (Oakland)
oyne City (Charlevoix)
righton (Livingston)
ronson (Branch)
rookline (Jackson)
uchanan (Berrien)

adillac (Wexford)
alumet (Houghton)
apac (St. Clair)
arleton (Monroe)
aro (Tuscola)
arson City (Montcalm)
ass City (Tuscola)
assopolis (Cass)
edar Springs (Kent)
enter Line (Macomb)
harlevoix (Charlevoix)
harlotte (Eaton)
heboygan (Cheboygan)
helsea (Washtenaw)
hesaning (Saginaw)
lare (Clare)

CITY and COUNTY

Clawson (Oakland)
Clinton (Lenawee)
Clio (Genesee)
Coldwater (Branch)
Coloma (Berrien)
Colon (St. Joseph)
Constantine (St. Joseph)
Coopersville (Kent)
Corunna (Shiawassee)
Croswell (Sanilac)

Davison (Genesee)
Dearborn (Wayne)
Decatur (Van Buren)
Detroit (Wayne)
Dexter (Washtenaw)
Dowagiac (Cass)
Dundee (Monroe)
Durand (Shiawassee)

East Ann Arbor (Washtenaw)
East Detroit (Macomb)
East Grand Rapids (Kent)
East Jordan (Charlevoix)
East Lansing (Ingham)
East Tawas (Iosco)
Eaton Rapids (Eaton)
Ecorse (Wayne)
Escanaba (Delta)
Essexville (Bay)
Evart (Osceola)

Farmington (Oakland)
Fenton (Genesee)
Ferndale (Oakland)
Flat Rock (Wayne)
Flint (Genesee)
Flushing (Genesee)
Fowlerville (Livingston)
Frankenmuth (Saginaw)
Frankfort (Benzie)
Fraser (Macomb)
Fremont (Newaygo)

Galesburg (Kalamazoo)
Garden City (Wayne)
Gaylord (Otsego)
Gladstone (Delta)
Gladwin (Gladwin)

CITY and COUNTY

Grand Haven (Ottawa)
Grand Ledge (Eaton)
Grand Rapids (Kent)
Grandville (Kent)
Grayling (Crawford)
Greenville (Montcalm)
Grosse Pointe (Wayne)
Grosse Pointe Farms (Wayne)
Grosse Pointe Park (Wayne)
Grosse Pointe Shores
(Wayne & Macomb)
Grosse Pointe Woods
(Wayne & Macomb)

Hamtramck (Wayne)
Hancock (Houghton)
Harbor Beach (Huron)
Harbor Springs (Emmet)
Hart (Oceana)
Hartford (Van Buren)
Hastings (Barry)
Hazel Park (Oakland)
Highland Park (Wayne)
Hillsdale (Hillsdale)
Holland (Ottawa)
Holly (Oakland)
Homer (Calhoun)
Houghton (Houghton)
Howell (Livingston)
Hubbell (Houghton)
Hudson (Lenawee)
Hudsonville (Ottawa)
Huntington Woods (Oakland)

Imlay City (Lapeer)
Inkster (Wayne)
Ionia (Ionia)
Iron Mountain (Dickinson)
Iron River (Iron)
Ironwood (Gogebic)
Ishpeming (Marquette)
Ithaca (Gratiot)

Jackson (Jackson)
Jonesville (Hillsdale)

Kalamazoo (Kalamazoo)
Kalkaska (Kalkaska)
Kingsford (Dickinson)

See page 2 for Index by counties.

Guide to Help Locate Cities within the Counties/Continued

CITY and COUNTY

Lake Linden (Houghton)
Lake Odessa (Ionia)
Lake Orion (Oakland)
L'Anse (Baraga)
Lansing (Ingham)
Lapeer (Lapeer)
Laurium (Houghton)
Lawton (Van Buren)
Leslie (Ingham)
Lincoln Park (Wayne)
Livonia (Wayne)
Ludington (Mason)

Mancelona (Antrim)
Manchester (Washtenaw)
Manistee (Manistee)
Manistique (Schoolcraft)
Manton (Wexford)
Marcellus (Cass)
Marine City (St. Clair)
Marlette (Sanilac)
Marquette (Marquette)
Marshall (Calhoun)
Marysville (St. Clair)
Mason (Ingham)
Melvindale (Wayne)
Menominee (Menominee)
Michigan Center (Jackson)
Middleville (Barry)
Midland (Midland)
Milan (Monroe & Washtenaw)
Milford (Oakland)
Millington (Tuscola)
Monroe (Monroe)
Montague (Muskegon)
Morenci (Lenawee)
Mount Clemens (Macomb)
Mount Morris (Genesee)
Mount Pleasant (Isabella)
Munising (Alger)
Muskegon (Muskegon)
Muskegon Heights (Muskegon)

Nashville (Barry)
Negaunee (Marquette)
Newaygo (Newaygo)
New Baltimore
 (Macomb & St. Clair)
Newberry (Luce)
New Buffalo (Berrien)
Niles (Berrien)
North Muskegon (Muskegon)

CITY and COUNTY

Northville (Wayne & Oakland)
Norway (Dickinson)

Oak Park (Oakland)
Onaway (Presque Isle)
Ontonagon (Ontonagon)
Otsego (Allegan)
Ovid (Clinton)
Owosso (Shiawassee)
Oxford (Oakland)

Painesdale (Houghton)
Parchment (Kalamazoo)
Paw Paw (Van Buren)
Pentwater (Oceana)
Perry (Shiawassee)
Petersburg (Monroe)
Petoskey (Emmet)
Pigeon (Huron)
Pinconning (Bay)
Plainwell (Allegan)
Pleasant Ridge (Oakland)
Plymouth (Wayne)
Pontiac (Oakland)
Port Huron (St. Clair)
Portland (Ionia)

Quincy (Branch)

Reading (Hillsdale)
Reed City (Osceola)
Richmond (Macomb)
River Rouge (Wayne)
Riverview (Wayne)
Rochester (Oakland)
Rockford (Kent)
Rockwood (Wayne)
Rogers City (Presque Isle)
Romeo (Macomb)
Roseville (Macomb)
Royal Oak (Oakland)

Saginaw (Saginaw)
Saint Clair (St. Clair)
Saint Clair Shores (Macomb)
Saint Ignace (Mackinac)
Saint Johns (Clinton)
Saint Joseph (Berrien)
Saint Louis (Gratiot)
Saline (Washtenaw)

CITY and COUNTY

Sandusky (Sanilac)
Saugatuck (Allegan)
Sault Sainte Marie (Chippewa)
Schoolcraft (Kalamazoo)
Scottville (Mason)
Sebewaing (Huron)
Shelby (Oceana)
Southfield (Wayne)
South Haven (Van Buren)
South Lyon (Oakland)
Sparta (Kent)
Spring Lake (Ottawa)
Stambaugh (Iron)
Standish (Arenac)
Stanton (Montcalm)
Stockbridge (Ingham)
Sturgis (St. Joseph)
Sylvan Lake (Oakland)

Tawas City (Iosco)
Tecumseh (Lenawee)
Three Rivers (St. Joseph)
Traverse City (Grand Traverse)
Trenton (Wayne)

Union City (Branch & Calhoun
Utica (Macomb)

Vandercook Lake (Jackson)
Van Dyke (Macomb)
Vassar (Tuscola)
Vicksburg (Kalamazoo)

Wakefield (Gogebic)
Walled Lake (Oakland)
Warren (Macomb)
Watervliet (Berrien)
Wayland (Allegan)
Wayne (Wayne)
West Branch (Ogemaw)
Whitehall (Muskegon)
White Pigeon (St. Joseph)
Wyandotte (Wayne)
Wyoming (Kent)

Yale (St. Clair)
Ypsilanti (Washtenaw)

Zeeland (Ottawa)

Michigan State Medical Society

20 West Saginaw Street (P.O. Box 152)
ast Lansing, Michigan 48823
17) 337-1351
WX-810-251-0781

Detroit Office
1010 Antietam Road
Detroit, Michigan 48207
(313) 965-0541

Officers of the Society
1966-1967

esident	C. Allen Payne, M.D.	Grand Rapids
esident-Elect	Bradley M. Harris, M.D.	Ypsilanti
cretary	Oliver B. McGillicuddy, M.D.	Lansing
reasurer	(To be elected in January, 1967)	
eaker	James J. Lightbody, M.D.	Detroit
ice Speaker	Louis F. Hayes, M.D.	Gaylord

The Council*

Robert J. Mason, M.D., Chairman, Birmingham
Ross V. Taylor, M.D., Vice Chairman, Jackson
Oliver B. McGillicuddy, M.D., Secretary, Lansing
Treasurer to be elected in January, 1967

ilton R. Weed, M.D.	1st	Detroit
lph R. Cooper, M.D.	1st	Grosse Pointe
n W. McLean, M.D.	1st	Detroit
lney Adler, M.D.	1st	Detroit
bert K. Whiteley, M.D.	1st	Grosse Pointe
ss V. Taylor, M.D.	2nd	Jackson
arvey C. Hansen, M.D.	3rd	Battle Creek
n Marshall, M.D.	4th	Kalamazoo
hn R. Pedden, M.D.	5th	Grand Rapids
arold H. Hiscock, M.D.	6th	Flint
hn J. Coury, M.D.	7th	Port Huron
Carl Stander, M.D.	8th	Saginaw
bert V. Daugharty, M.D.	9th	Cadillac
lward H. Rodda, M.D.	10th	Bay City
ooker L. Masters, M.D.	11th	Fremont
gene R. Elzinga, M.D.	12th	Marquette
hn R. Franck, Jr., M.D.	13th	Wakefield
rold F. Falls, M.D.	14th	Ann Arbor
bert J. Mason, M.D.	15th	Birmingham
Allen Payne, M.D.	President	Grand Rapids
adley M. Harris, M.D.	President-Elect	Ypsilanti
mes J. Lightbody, M.D.	Speaker	Detroit
uis F. Hayes, M.D.	Vice Speaker	Gaylord
ther R. Leader, M.D.	Past President	Royal Oak

Executive Committee of The Council

bert J. Mason, M.D.	Chairman
ss V. Taylor, M.D.	Vice Chairman
rold H. Hiscock, M.D.	Chairman, County Societies Committee
ooker L. Masters, M.D.	Chairman, Publication Committee
Robert K. Whiteley, M.D.	Chairman, Finance Committee
James J. Lightbody, M.D.	Speaker
Louis F. Hayes, M.D.	Vice Speaker
C. Allen Payne, M.D.	President
Bradley M. Harris, M.D.	President-Elect
Oliver B. McGillicuddy, M.D.	Secretary
(To be elected in January, 1967)	Treasurer

As of November 1, 1966

MSMS Staff

Executive Staff

Brenneman, Hugh W.	—Executive Director Research and Development
Tryloff, Warren F.	—Associate Executive Director Administration
Auer, Herbert A.	—Michigan Medicine Communications
Riley, M. A.	—Legislation House of Delegates

Administrative Staff

Campau, Richard M.	—Detroit Regional Office Economic Research
Mehler, Herbert	—Government Agency Liaison
Wills, Ralph T.	—Community Relations
Hoheisel, Peter	—Assistant, Detroit Regional Office Assistant, Communications
Roney, Robert J.	—Accounting and Membership
Schulte, Helen A.	—Medical Science
Karker, Marjorie	—Women's Activities
Hoover, Maynard J.	—Production
Brewbaker, Mary K.	—Exhibits and Committees
Ryon, Ruth	—Secretary to Executive Director
Davis, Vada L.	—Secretary to Associate Executive Director
Snelgrove, Alice M.	—Secretary and Writer, Michigan Medicine
Veen, Jennie I.	—Staff Secretary, Legislation House of Delegates
Mueller, Julie A.	—Staff Secretary, Government Agencies
Doll, Sandra J.	—Staff Secretary, Accounting and Membership
Henderson, Audrey	—Staff Secretary, Detroit Regional Office
Merz, Helen	—Receptionist
Edgley, Beth	—Receptionist

Advisory

Dodd, Lester P.	—General Counsel
Kerr, A. Stewart	—Legal Counsel
Lowrey, George H., MD	—Scientific Editor, Michigan Medicine
Hardwick, Clyde T.	—Consultant, Economics

Michigan Foundation for Medical and Health Education

Purpose: "To acquire, provide, use, develop, endow and finance methods, means and facilities for postgraduate education in medicine, for education in medicine, for lay health education, and for research, fellowships, and scholarships, all in such manner as the Trustees shall determine. This corporation is organized and shall be operated exclusively for benevolent, scientific and educational purposes and its property shall be used by it solely for the purposes for which it is incorporated."

President: E. I. Carr, M.D., 120 West Saginaw East Lansing
Secretary: W. F. Tryloff, 120 West Saginaw, Eas Lansing
Treasurer: H. H. Gardner, Birmingham
Trustees:
- E. I. Carr, M.D., Lansing
- T. N. Evans, M.D., Detroit
- H. H. Gardner, Birmingham
- G. T. McKean, M.D., Detroit
- G. B. Saltonstall, M.D., Charlevoix
- J. M. Sheldon, M.D., Ann Arbor
- J. F. Wolfram, Lansing

MSMS Delegates to AMA*

Delegates*	Term Expires
tto K. Engelke, M.D., Ann Arbor	1967
R. Heidenreich, M.D., Daggett	1967
R. Leader, M.D., Royal Oak	1967
obert E. Rice, M.D., Greenville	1967
idney Adler, M.D., Detroit	1968
eorge W. Slagle, M.D., Battle Creek	1968
onald N. Sweeny, Jr., M.D., Detroit	1968
oseph A. Witter, M.D., Detroit	1968

Alternates*	Term Expires
W. C. C. Cole, Sr., M.D., Detroit	1967
B. M. Harris, M.D., Ypsilanti	1967
G. B. Saltonstall, M.D., Charlevoix	1967
James C. Danforth, Jr., M.D., Detroit	1968
John J. Coury, M.D., Port Huron	1968
Marjorie Peebles Meyers, M.D., Detroit	1968
Vernon V. Bass, M.D., Saginaw	1968
Harold A. Furlong, M.D., Pontiac	1967

As of January, 1967

Section Delegates to AMA

ir Force: Maj. Gen. R. L. Bohannon, MC, Dept. of Air Force, Washington, D.C., 20333 (Dec., 1966)

rmy: Lt. Gen. L. D. Heaton, MC, Dept. of Army, Washington, D.C., 20310 (Dec., 1966)

avy: Rear Adm. R. B. Brown, MC, Dept. of Navy, Bureau of Med. & Surg., Washington, D.C., 20390 (Dec., 1966)

ublic Health: Vacancy

A: J. H. McNinch, M.D., U.S.V.A., Washington, D.C., 20420 (Dec., 1966)

llergy: John M. Sheldon, M.D., 1405 E. Main Street, Ann Arbor, 48104 (Dec., 1966)

nesthesiology: J. H. Failing, M.D., 475 Buena Vista St., San Marino, Calif., 91108 (Dec., 1966)

ermatology: Clarence S. Livingood, M.D., 2799 W. Grand Blvd., Detroit, 48202 (Dec., 1966)

iseases of Chest: J. Winthrop Peabody, Sr., M.D., 1746 K St., N.W., Washington, D.C., 20006 (Dec., 1966)

xperimental Medicine: Samuel P. Martin, M.D., Univ. of Florida, J. Hillis Miller Health Ctr., Gainesville, Fla., 32603 (Dec., 1966)

astroenterology: Wm. H. Dearing, M.D., Mayo Clinic, 200 1st St., S.W., Rochester, Minn., 55902 (Dec., 1966)

eneral Practice: Carroll L. Witten, M.D., 2237 Taylorsville Rd., Louisville, Ky., 40205 (Dec., 1966)

eneral Surgery: R. Russell Best, M.D., 4239 Farnam St., Omaha, Neb., 68131 (Dec., 1966)

ternal Medicine: Carter Smith, M.D., 1938 Peachtree Rd., Atlanta, Ga., 30309 (Dec., 1966)

Laryngology. Otology & Rhinology; Paul H. Holinger, M.D., 700 N. Michigan Ave., Chicago, Ill., 60611 (Dec., 1965)

Military Medicine: Oscar P. Hampton, Jr., M.D., 3720 Washington, St. Louis, Mo., 63108 (Dec., 1965)

Nervous & Mental Diseases: Clark H. Millikan, M.D., Mayo Clinic, 200 1st St., S.W., Rochester, Minn., 55902 (Dec., 1966)

Obstetrics & Gynecology: Ralph Campbell, M.D., 1300 University Ave., Madison, Wis., 53706 (Dec., 1965)

Ophthalmology: Harold F. Falls, M.D., Dept. of Ophthalmology, Univ. of Mich. Med. Ctr., 1405 E. Ann St., Outpatient Bldg., Rm. C6264, Ann Arbor, 48104 (Dec., 1966)

Orthopedic Surgery: Harry R. Walker, M.D., 485 34th St., Oakland, Calif., 94609 (Dec., 1965)

Pathology & Physiology: Lall G. Montgomery, M.D., Dept. of Pathology, Ball Mem'l Hosp., Muncie, Ind., 47303 (Dec., 1965)

Pediatrics: Edgar E. Martmer, M.D., 460 Eastland Ctr. Prof. Bldg., Harper Woods, Mich., 48236 (Dec., 1966)

Physical Medicine: Walter J. Zeiter, M.D., Cleveland Clinic, 2020 E. 93rd St., Cleveland, Ohio, 44106 (Dec., 1965)

Preventive Medicine: Rutherford T. Johnstone, M.D., 520 W. 7th St., Los Angeles, Calif., 90014 (Dec., 1965)

Proctology: Maus W. Sterns, M.D., 215 E. 68th St., New York, N.Y., 10021 (Dec., 1966)

Radiology: Eugene P. Pendergrass, M.D., 3400 Spruce St., Philadelphia, Pa., 19104 (Dec., 1965)

Urology: Jay J. Crane, M.D., 1930 Wilshire Blvd., Los Angeles, Calif., 90057 (Dec., 1966)

MSMS Delegates and Alternates* For 1966 House of Delegates

OFFICERS

Speaker
James J. Lightbody, M.D., 501 David Whitney Bldg., Detroit
Vice Speaker
Louis F. Hayes, M.D., Gaylord
Immediate Past President
Luther R. Leader, M.D., 3535 W. 13 Mile Road, Royal Oak

ALLEGAN

Gerald Vander Voord, M.D., 312 E. Plum Street, Wayland
Lewis F. Brown, M.D., 133 E. Allegan St., Otsego

ALPENA-ALCONA-PRESQUE ISLE

Frederick C. O'Dell, M.D., 110 W. Chisholm, Alpena
Edward A. Hier, M.D., 125 N. 2nd Ave., Alpena

BARRY

Robert J. Huebner, M.D., 110 W. Center St., Hastings
Wesley G. Logan, M.D., City Bank Building, Hastings

BAY-ARENAC-IOSCO

William G. Gamble, Jr., M.D., 101 W. John Street, Bay City
Robert C. Prophater, M.D., 101 W. John Street, Bay City
Joseph E. Loree, M.D., 1407 Center, Bay City

BERRIEN

F. Alan Kennedy, M.D., 315 Fidelity Building, Benton Harbor
Frederick H. Lindenfeld, M.D., 8 North St. Joseph, Niles
Noel J. Hershey, M.D., 122 Grant, Niles

BRANCH

Robert M. Leitch, M.D., 403 Ann Street, Union City
James M. Burke, M.D., 40 Balfour Drive, Coldwater

CALHOUN

Keith S. Wemmer, M.D., 1472 W. Michigan Ave., Battle Creek
Russell C. Rowan, M.D., 500 S. Ionia Street, Albion
George T. Kelleher, M.D., 235 North Ave., Battle Creek
Alfred G. McCuaig, M.D., 719 Capitol St., SW, Battle Creek
David E. Boswell, M.D., 105 N. Jefferson, Marshall
Salvatore A. Yanitelli, M.D., 710 North Ave., Battle Creek

CASS

Uriah M. Adams, M.D., Marcellus
Sherman L. Loupee, M.D., 108 Orchard Street, Dowagiac

CHIPPEWA-MACKINAC

Donald D. Finlayson, M.D., 302 E. Spruce Street, Sault Ste. Marie
William F. Mertaugh, M.D., Central Savings Bank Bldg., Sault Ste. Marie

CLINTON

Franklin W. Smith, M.D. 205 W. State Street, St. Johns
James M. Grost, M.D., 110 Oakland Street, St. Johns

DELTA-SCHOOLCRAFT

Merle E. Wehner, M.D., 131 River Street, Manistique
Donald N. Fitch, M.D., 804 Ludington Street, Escanal

DICKINSON-IRON

Donald T. Anderson, M.D., Dickinson Memorial Hos Iron Mountain
William G. Gladstone, M.D., 804 Main Street, Norw

EATON

Byron P. Brown, M.D., 339 S. Cochran Ave., Charlot
Clayton O. Willits, M.D., 127 Upland St., Charlotte

GENESEE

Lawrence G. Bateman, M.D., 1928 Lewis Street, Flint
Clifford W. Colwell, M.D., 328 S. Saginaw Street, Flint
Ernest P. Griffin, M.D., 1505 Arrow Lane, Flint 7
Franklin W. Baske, M.D., 923 Maxine Street, Flint 3
Philip K. Stevens, M.D., 1116 Mott Foundation Buil ing, Flint
H. Maxwell Golden, M.D., 218 E. Court Street, Flint
John Quin, Jr., M.D., 2765 Flushing Road, Flint 4
Robert M. Weber, M.D., 3710 Davison Road, Flint 6
Richard J. McMurray, M.D., 2765 Flushing Road, Flin
Charles A. Thompson, M.D., 4211 Comstock Street, Fli 4
Glenn E. Moore, M.D., 323 West Second, Flint 3
Vernon C. Urich, M.D., 3169 West Pierson Road, Flin

GOGEBIC

John R. Franck, Jr., M.D., 401 Sunday Lake, Wakefie

GRAND TRAVERSE-LEELANAU-BENZIE

Frank H. Power, M.D., 116 Cass Street, Traverse C
Donald G. Pike, M.D., 1105 E. Front Street, Trave City

GRATIOT-ISABELLA-CLARE

John M. Wood, M.D., 314 S. Brown, Mt. Pleasant
John M. Stack, M.D., 310 Warwick Road, Alma

HILLSDALE

Clark B. Smith, M.D., 36 Highland, Hillsdale
Luther W. Day, M.D., 112 E. Chicago, Jonesvill
Arthur W. Strom, M.D., 141 Budlong, Hillsdale

HOUGHTON-BARAGA-KEWEENAW

Paul S. Sloan, M.D., 609 Sheldon Ave., Houghton
Henry J. Winkler, M.D., Baraga County Memorial H pital, L'Anse

HURON

Charles W. Oakes, Jr., M.D., Harbor Beach
Edward E. Steinhardt, M.D., Box 15, Elkton 48731

INGHAM

Robert M. Stow, M.D., 2909 E. Grand River, Lansin
D. Bonta Hiscoe, M.D., 2909 E. Grand River, Lansin
Herbert W. Harris, M.D., 609 N. Washington A Lansing
Henry E. Malcolm, M.D., 2909 E. Grand River A Lansing
Lawrence A. Drolett, M.D., 3526 W. Saginaw St., Lans
Charles O. Long, M.D., 2909 E. Grand River, Lansin

---

*Names of Alternates are in italics

homas C. Blair, M.D., 1322 E. Michigan Ave., Lansing
oseph R. Cipparone, M.D., St. Lawrence Hospital, Lansing
ichard S. Johnson, M.D., 521 N. Capitol, Lansing
onald B. Moore, M.D., 1322 E. Michigan Ave., Lansing

IONIA-MONTCALM

obert E. Rice, M.D., Memorial Clinic, Greenville
ichard E. Campbell, M.D., 111 N. Kidd, Ionia

JACKSON

rancis P. McQuillan, M.D., 611 Center St., Jackson
arold L. Oster, M.D., 1218 Greenwood, Jackson
oodward A. Wickham, M.D., 2029 Fourth, Jackson
obert J. Kobs, M.D., 720 W. Franklin, Jackson

KALAMAZOO

. John Neerken, M.D., 402 Bronson Med. Center, Kalamazoo
illiam Birch, M.D., 252 E. Lovell, Kalamazoo
rederick C. Ryan, M.D., 1631 Gull Road, Kalamazoo
rederick J. Margolis, M.D., 2901 S. Westnedge, Kalamazoo
ussell M. Cashen, M.D., 403 Bronson Medical Center, Kalamazoo
obert R. Dew, M.D., 1711 Merrill Street, Kalamazoo
obert H. Hume, M.D., 1711 Merrill Street, Kalamazoo

KENT

ed C. Brace, M.D., 1498 Lake Drive, SE, Grand Rapids 49506
llison R. Vanden Berg, M.D., 833 Lake Drive SE, Grand Rapids 49506
oyes L. Avery, Jr., M.D., 515 Lakeside Drive, SE, Grand Rapids 49506
ederick S. Gillett, M.D., 50 College Ave., SE, Grand Rapids 49503
arvey M. Andre, M.D., 500 Cherry St., SE, Grand Rapids 49503
ichard A. Rasmussen, M.D., 1810 Wealthy St., SE, Grand Rapids 49506
ck Hoogerhyde, M.D., 26 Sheldon Ave., SE, Grand Rapids 49502
ctor A. Notier, M.D., 50 College Ave., SE, Grand Rapids 49503
rnelius Van Goor, M.D., 26 Sheldon Ave., SE, Grand Rapids 49502
ck G. Lukens, M.D., 245 State St., SE, Grand Rapids 49502
hn C. Montgomery, M.D., 1810 Wealthy St., SE, Grand Rapids 49506
arren C. Pilling, M.D., 833 Lake Drive, SE, Grand Rapids 49506
inard P. Nanzig, M.D., 153 Lafayette Ave., SE, Grand Rapids 49503
vid J. Horning, M.D., 26 Sheldon Ave., SE, Grand Rapids 49502
illiam E. Kincaid, M.D., 100 Michigan St., NE, Grand Rapids 49503
illiam G. O'Driscoll, M.D., 515 Lakeside Dr., SE, Grand Rapids 49506
bert J. Raiman, M.D., 50 College Ave., SE, Grand Rapids 49503
ck H. Townsend, M.D., 515 Lakeside Dr., SE, Grand Rapids 49506

LAPEER

James R. Doty, M.D., 315 Clay Street, Lapeer
Cornell Greavu, M.D., North Branch

LENAWEE

Donato F. Sarapo, M.D., Mill Street, Adrian
Marvin B. Wolf, M.D., 689 Stockford Dr., Adrian

LIVINGSTON

Edwin S. Woodworth, M.D., 1200 Byron Road, Howell
Robert T. Polack, M.D., 1223 Thurber Drive, Howell

LUCE

B. Greg Keizer, M.D., Newberry State Hospital, Newberry
Lawrence E. Grennan, M.D., 210 W. John, Newberry

MACOMB

Peter V. Kane, M.D., 67 Cass Ave., Mt. Clemens
Sydney Scher, M.D., 132 Cass, Mt. Clemens
Edward G. Siegfried, M.D., 229 S. Gratiot, Mt. Clemens
Bernard J. Goldman, M.D., 243 S. Gratiot, Mt. Clemens
Daniel L. Rousseau, M.D., Lobby Suite, Monitor Leader Bldg., Mt. Clemens

MANISTEE

Marlo L. Schwarz, M.D., Onekama
Donald N. Schwing, M.D.,, Cypress and Ninth, Manistee 49660

MARQUETTE-ALGER

George M. Wilson, Jr., M.D., 1414 W. Fair Ave., Marquette
Fred C. Sabin, M.D., 1414 W. Fair Ave., Marquette

MASON

William F. Sutter, M.D., 220 S. James St., Ludington
Robert L. Ewing, M.D., Tinkham Ave., Ludington

MECOSTA-OSCEOLA-LAKE

James L. Tyson, M.D., 1014 S. State, Big Rapids
Leland A. Hickox, M.D., 1014 S. State, Big Rapids

MENOMINEE

Herman R. Brukardt, M.D., Menominee
William S. Jones, Jr., M.D., Menominee

MIDLAND

V. A. Marks, M.D., 2706 Louanna, Midland
Harold L. Gordon, M.D., Medical Dept., Dow Chemical Co., Midland

MONROE

S. Newton Kelso, Jr., M.D., 116 Cole Road, Monroe
Bernard Sisman, M.D., 130 Cole Road, Monroe

MUSKEGON

H. Clay Tellman, M.D., 315 West Clay St., Muskegon
Leland E. Holly, II, M.D., 889 Second Street, Muskegon
Robert J. Fles, M.D., 1715 Peck Street, Muskegon
John D. Folsom, M.D., 1706 Peck Street, Muskegon
Everett H. Johnston, M.D., 889 Second Street, Muskegon
Clarence A. Vandervelde, M.D., 1470 Peck Street, Muskegon

NEWAYGO

J. Paul Klein, M.D., 16 W. Sheridan, Fremont
Hugh R. Moore, M.D., 38 State Road, Newaygo

NORTH CENTRAL

Louis F. Hayes, M.D., Gaylord
Charles L. Oppy, M.D., Roscommon

---

ames of Alternates are in italics

House of Delegates Continued

NORTHERN MICHIGAN

Thomas R. Kirk, M.D., Burns Clinic, Petoskey
Joanne E. Mertz, M.D., Burns Clinic, Petoskey

OAKLAND

Arnold L. Brown, M.D., 35 S. Johnson St., Pontiac 48053
Carl H. Birkele, M.D., 4680 Dixie Highway, Drayton Plains
Edward E. Elder, Jr., M.D., 1116 Voorheis, Pontiac 48054
Richard R. Galpin, M.D., 525 Southfield Rd., Birmingham
F. Michael Sheridan, M.D., 1307 S. Washington, Royal Oak 48013
Paul T. Lahti, M.D., 3600 W. 13 Mile Road, Royal Oak 48072
Harold A. Furlong, M.D., 35 S. Johnson, Pontiac 48053
James R. Quinn, M.D., 880 Woodward, Pontiac 48053
John H. McLaughlin, M.D., 604 N. Woodward, Birmingham 48011
Shelby M. Baylis, M.D., 35 S. Johnson, Pontiac 48053
Bruce D. Bauer, M.D., 22643 Stephenson Highway, Hazel Park
Raymond A. Gagliardi, M.D., 880 Woodward, Pontiac 48053
Bruce A. Kresge, M.D., 1500 Walton Blvd., Rochester 48063
James E. Henderson, M.D., 880 Woodward, Pontiac 48053
Harry Arnkoff, M.D., 140 Illinois, Pontiac 48053
James A. Read, M.D., 610 N. Woodward, Birmingham 48011
John Lee Barrett, M.D., 800 S. Adams Road, Birmingham 48011
Charles R. Sempere, M.D., 35 S. Johnson, Pontiac 48053
Donald G. Albert, M.D., 1665 W. 12 Mile Road, Berkley 48072
John R. Lichtwardt, M.D., 247 N. Hunter Blvd., Birmingham 49013

OCEANA

John J. Vrbanac, M.D., 22 N. State Street, Hart
Willis A. Hasty, M.D., Shelby

ONTONAGON

James P. Strong, M.D., 701 River St., Ontonagon
Donald H. Archibald, M.D., 101 Second Street, Ontonagon

OTTAWA

William Rottschaefer, M.D., Holland Medical Center, Holland
Peter J. De Vries, M.D., 214 Washington Street, Grand Haven

SAGINAW

Vernon V. Bass, M.D., 3322 Davenport, Saginaw
Robert J. Toteff, M.D., 2110 Morson, Saginaw
Duane B. Heilbronn, M.D., 1703 N. Michigan, Saginaw
Roy J. Gerard, M.D., 2419 Mackinaw, Saginaw
Vital E. Cortopassi, M.D., 324 S. Washington, Saginaw
Edward F. Kickham, M.D., 705 Adams, Saginaw

ST. CLAIR

James H. Tisdel, M.D., 310 E. Water Street, Port Huro
Anthony G. Gholz, M.D., 1209 Tenth Street, Port Huro
John M. Miller, M.D., 1010 Griswold Street, Port Huro
Claude A. Ludwig, M.D., 916 7th Street, Port Huron

ST. JOSEPH

Stanley C. Penzotti, M.D., 117 Spring St., Three Rive
S. Albert Fiegel, M.D., 111 S. Monroe, Sturgis

SANILAC

Keate T. McGunegle, M.D., Sandusky
Raymond J. Winfield, M.D., Marlette

SHIAWASSEE

Claude L. Weston, M.D., Matthews Bldg., Owosso
Henry T. Forsyth, M.D., Chesaning

TUSCOLA

Edward J. Miles, M.D., Caro
Maurice H. Chapin, M.D., Millington

VAN BUREN

Edwin H. Terwilliger, M.D., P.O. Box 110, South Have
David J. Millard, M.D., Paw Paw

WASHTENAW

Gerhard H. Bauer, M.D., 2015 Manchester Road, A Arbor
Harold F. Falls, M.D., University Medical Center, A Arbor
John E. Magielski, M.D., St. Joseph Mercy Hospit Ann Arbor
Beverly C. Payne, M.D., 425 E. Washington St., A Arbor
Clarence E. Crook, M.D., St. Joseph Mercy Hospit Ann Arbor
L. Dell Henry, M.D., 706 W. Huron, Ann Arbor
Henry A. Scovill, M.D., 107 Washtenaw, Ypsilanti
Harry A. Towsley, M.D., University Medical Cent Ann Arbor
Stuart M. Gould, Jr., M.D., Box 65, Mercywood H pital, Ann Arbor
John W. Henderson, M.D., University Medical Cent Ann Arbor
George S. Sayre, M.D., 27 S. Prospect, Ypsilanti
William R. Rekshan, M.D., 2015 Manchester Road, A Arbor
Dean P. Carron, M.D., 425 E. Washington, Ann Arbor
Joseph V. Fisher, M.D., 116 Park St., Chelsea
Howard R. Williams, M.D., 1950 Manchester Road, A Arbor
Earl F. Wolfman, Jr., M.D., University Medical Cent Ann Arbor

WAYNE

Brock E. Brush, M.D., Henry Ford Hosp., Detroit 48
Frank B. Bicknell, M.D., 938 David Whitney Bldg., troit 48226
James C. Danforth, Jr., MD.., 20175 Mack, Detroit 48
James B. Blodgett, M.D., 606 Kales Bldg., Detroit 48
James J. Lightbody, M.D., 501 David Whitney Bl Detroit 48226
Donald N. Sweeny, Jr., M.D., 8445 E. Jefferson, Detr 48214

---

*Names of Alternates are in italics

dney Adler, M.D., 755 Fisher Bldg., Detroit 48202
ancis P. Rhoades, M.D., 2414 David Broderick Tower, Detroit 48226
yman C. C. Cole, Jr., M.D., 1063 Fisher Bldg., Detroit 48202
mes D. Fryfogle, M.D., Med. Concourse, Northland Center, Southfield
seph J. Montante, M.D., 18715 Bretton Dr., Detroit 48223
arjorie Peebles Meyers, M.D., 5320 John R, Detroit 48202
uis E. Heideman, M.D., 20211 Greenfield, Detroit 48235
Jackson France, M.D., 17712 Mack, Detroit 48224
exander Blain, III, M.D., 2201 E. Jefferson, Detroit 48207
illiam L. Brosius, M.D., 1554 Tuxedo, Detroit 48206
arles E. Darling, M.D., 673 Fisher Bldg., Detroit 48202
Jackson Day, M.D., 220 Eastland Professional Bldg., Detroit 48236
ul J. Connolly, M.D., 18255 W. McNichols Rd., Detroit 48219
ymond J. Barrett, M.D., 307 David Whitney Bldg., Detroit 48226
mer M. Smathers, M.D., 17620 W. McNichols, Detroit 48235
Thomas McKean, M.D., 1515 David Whitney Bldg., Detroit 48226
orge T. Bradley, M.D., 1201 David Whitney Bldg., Detroit 48226
ssell F. Fenton, M.D., 15125 Grand River, Detroit 48227
illiam J. Yott, M.D., 17420 E. Warren, Detroit 48224
orge L. Reno, M.D., 970 Fisher Bldg., Detroit 48202
fred H. Whittaker, M.D., 17000 E. Jefferson, Detroit 48230
hn G. Slevin, M.D., 1304 Broderick Tower, Detroit 48226
phael Altman, M.D., 17000 W. Eight Mile Rd., Southfield
uis Carbone, M.D., 14711 Gratiot, Detroit 48205
erwin J. Lutz, M.D., 15121 W. McNichols, Detroit 35
ax L. Lichter, M.D., 2900 Oakwood Blvd., Melvindale 48122
mes M. Kennary, M.D., 4900 Cadieux Rd., Detroit 24
hn E. Hauser, M.D., 20905 Greenfield, Southfield
bert H. Hamburg, M.D., 1515 David Whitney Bldg., Detroit 48226
lney E. Chapin, M.D., 125 N. Military, Dearborn 7
seph A. Witter, M.D., 344 Glendale, Detroit 48203
ymour S. Adelson, M.D., 18400 Shaefer, Detroit 48235
mer A. Howes, M.D., 1515 David Whitney Bldg., Detroit 48226
Stephen Bohn, M.D., 10 Peterboro, Detroit 48201
lph H. Pino, M.D., 48151 W. Ann Arbor Rd., Plymouth
vin A. Wilner, M.D., 17701 W. McNichols, Detroit 48235
n A. Young, M.D., 14807 W. McNichols Rd., Detroit
ario A. Petrini, M.D., 1080 Fisher Bldg., Detroit 48202
i J. Igna, M.D., Henry Ford Hospital, Detroit 48202
arke M. McColl, M.D., Henry Ford Hospital, Detroit 48202

Harold B. Fenech, M.D., 205 Professional Bldg., 3790 Woodward, Detroit 48201
Benjamin Jeffries, M.D., 19959 Vernier Rd., Harper Woods
John W. Moses, M.D., 754 Fisher Bldg., Detroit 2
Raymond A. Sokolov, M.D., 3011 W. Grand Blvd., Detroit 2
Joseph N. Schaeffer, M.D., 261 Brady, Detroit 1
Fred W. Whitehouse, M.D., 2799 W. Grand Blvd., Detroit 2
George Mogill, M.D., 3150 Second Blvd., Detroit 1
Arthur B. Levant, M.D., 15715 E. Warren, Detroit 24
Harry Y. Kasabach, M.D., 952 David Whitney Bldg., Detroit 48226
James E. Coyle, M.D., 573 Fisher Bldg., Detroit 2
H. Ross Hume, M.D., 1553 Woodward, Detroit 26
Ernest L. Stefani, M.D., 18455 Jas. Couzens Hwy., Detroit 35
John W. Sigler, M.D., Henry Ford Hospital, Detroit
Reuben I. Shapiro, M.D., 22341 W. 8 Mile Rd., Detroit
J. William Derr, M.D., 1145 David Whitney Bldg., Detroit 26
Laurel S. Eno, M.D., 212 Eastland Pr. Bldg., Detroit 36
Henry M. Domzalski, M.D., 15252 Gratiot Ave., Detroit 5
Earl E. Weston, M.D., 18101 Jas. Couzens Hwy., Detroit 35
David W. Lindner, M.D., 801 David Whitney Bldg., Detroit 26
Carl A. Gagliardi, M.D., 3516 Fort St., Lincoln Park
Saul Sakwa, M.D., 17000 W. Eight Mile, Southfield
Elden C. Baumgarten, M.D., 1062 Lockmoor Blvd., Grosse Pointe Woods
Robert C. Thumann, M.D., 20045 Mack Ave., Grosse Pointe Woods
Carl J. Sprunk, M.D., 2900 Oakwood Blvd., Melvindale
Paul H Dumke, M.D., 2799 W. Grand Blvd., Detroit 2
Robert A. Gerisch, M.D., 1217 David Whitney Bldg., Detroit 26
Charles J. Holt, Jr., M.D., 1210 S. Oxford, Grosse Pte. 30
Lee E. Feldkamp, M.D., 360 N. Main, Plymouth
Fred E. Caumartin, M.D., 17184 Wildemere, Detroit 21
Walter L. Anderson, M.D., 1553 Woodward Ave., Detroit 26
Walter W. Hassig, M.D., 20914 Kelly, East Detroit
Frank B. Walker, M.D., 1305 Berkshire Rd., Grosse Pte.
Fredrick Weissman, M.D., 20905 Greenfield Rd., Southfield
Walter F. Kujawski, M.D., 16840 E. Warren, Detroit 24
Charles P. Anderson, M.D., 16733 Plainview Rd., Detroit
Everal M. Wakeman, M.D., 23100 Cherryhill, Dearborn
Richard S. Kamil, M.D., 14438 McNichols, Detroit 35
Arthur A. Ulmer, M.D., 79 Greenbriar, Grosse Pointe Shores
Thomas Ganos, M.D., 6742 Park Ave., Allen Park
Arthur M. Clark, M.D., 401 River Lane, Dearborn
E. Clarkson Long, M.D., 19751 James Couzens Hwy., Detroit 35
Robert P. Lytle, M.D., 402 Northland Med. Bldg., Southfield
Alfred Golden, M.D., 26764 York Rd., Huntington Woods
James R. Lloyd, M.D., 1515 David Whitney Bldg., Detroit
Gerald H. Mandell, M.D., Sinai Hospital, Detroit 35

---

ames of Alternates are in italics

House of Delegates Continued

Andrew R. W. Climie, M.D., Harper Hospital, Detroit
Raymond J. Kokowicz, M.D., 19440 Van Dyke, Detroit 34
Clayton M. Shores, M.D., 19635 Mack Ave., Detroit 35
Vincent J. Gallant, M.D., 16766 Ashton, Detroit 19
Paul M. Zavell, M.D., 1932 Broadstone, Grosse Pte. Woods
Alexander H. Hirschfeld, M.D., 829 Fisher Bldg., Detroit 2
Edward D. Maire, M.D., 15224 E. Jefferson, Detroit 30
Victor E. Nelson, M.D., 3025 Crooks Rd., Royal Oak
John W. Moynihan, M.D., 2841 Monroe Blvd., Dearborn
Lee B. Stevenson, M.D., Henry Ford Hospital, Detroit
Frank W. Prust, M.D., 1536 David Whitney Bldg., Detroit
Edward G. Forgrave, M.D., 18520 Grand River, Detroit 23
Donald I. Bryan, M.D., 13700 Woodward Ave., Highland Park 3
Horace F. Bradfield, M.D., 3008 E. Grand Blvd., Detroit
John M. Shuey, M.D., 17198 Oak Dr., Detroit 21
John J. Smolenski, M.D., 13815 Puritan Ave., Detroit 27
Jean M. Holdredge, M.D., 3011 W. Grand Blvd., Detroit 2
Louis R. Zako, M.D., 9845 Reeck Rd., Allen Park
John J. Siller, M.D., 17000 W. 8 Mile Rd., Southfield

WEXFORD-MISSAUKEE

Dennis E. Van Alst, M.D., Medical Arts Group, Cadillac
Lawrence O. Garber, M.D., 222 Howard Street, Cadillac

SECTION DELEGATES

Chapter 9, Section 2, MSMS Bylaws: "The officers of this Society, the members of The Council and one delegate from each authorized section shall be ex-officio members of the House of Delegates, but with the exception of the Speaker and Vice Speaker of the House of Delegates, shall be without power to vote therein. The immediate Past President shall be a member at large of the House of Delegates during the first year of past-presidency with right to vote and hold office. All other Past Presidents shall have the privilege of the floor, without the right to vote."

ALLERGY AND APPLIED IMMUNOLOGY

James A. McLean, M.D., 1313 E. Ann St., Ann Arbor
(Alternate not elected)

ANESTHESIOLOGY

Ralph S. Askam, M.D., Medical Arts Center, Muskegon
John D. Snider, M.D., 1827 Argentina Dr., SE, Grand Rapids

DERMATOLOGY

Robert J. Schoenfeld, M.D., 794 N. Woodward Ave., Birmingham
(Alternate not elected)

GASTROENTEROLOGY

Joseph A. Rinaldo, Jr., M.D., Henry Ford Hospital, Detroit
(Alternate not elected)

GENERAL PRACTICE

Douglas A. Haddock, M.D., 6646 Portage St., Kalamazoo
(Alternate not elected)

GYNECOLOGY AND OBSTETRICS

Philip S. Peven, M.D., 18790 Meyers Road, Detroit 3
(Alternate not elected)

INTERNAL MEDICINE

Carl B. Beeman, M.D., 515 Lakeside Dr., SE, Gran Rapids
(Alternate not elected)

NEUROLOGICAL SURGERY

Austin E. Lamberts, M.D., 68 Ransom Ave., NE, Gran Rapids
(Alternate not elected)

OCCUPATIONAL MEDICINE

Martin F. Bruton, M.D., 341 Massachusetts, Detroit 3
(Alternate not elected)

OPHTHALMOLOGY AND OTOLARYNGOLOG

James L. Frey, M.D., (Opth.) 1553 Woodward Ave Detroit 26
G. Don Albers, M.D., (Oto.) 203 Paris Ave., SE, Gran Rapids
(Alternates not elected)

ORTHOPEDIC SURGERY

Hira E. Branch, M.D., 821 Mott Fdn. Bldg., Flint 4850
(Alternate not elected)

PATHOLOGY

Robert C. Horn, Jr., M.D., 2799 W. Grand Blvd., Detroi
(Alternate not elected)

PEDIATRICS

Robert J. McGillicuddy, M.D., 300 W. Ottawa, Lansin
(Alternate not elected)

PLASTIC SURGERY

Ralph Blocksma, M.D., 245 State St., SE, Grand Rapid
(Alternate not elected)

PROCTOLOGY

Donald J. Pearson, M.D., 255 North Ave., Battle Cree
(Alternate not elected)

PSYCHIATRY AND NEUROLOGY

(Not elected)
(Alternate not elected)

PUBLIC HEALTH AND PREVENTIVE MEDICINE

Oscar D. Stryker, M.D., 43525 Elizabeth Rd., Mt. Clemens
G. Fred Moench, M.D., 147 Center St., Sanford

RADIOLOGY

Benjamin R. Van Zwalenburg, M.D., 2116 Coronad Dr., SE, Grand Rapids
(Alternate not elected)

SURGERY

John W. Derr, M.D., 1145 David Whitney Bldg., Detro
(Alternate not elected)

UROLOGY

Murray S. Mahlin, M.D., 16820 Greenfield Ave., Detro
(Alternate not elected)

**Names of Alternates are in italics*

MSMS Section Officers*

Allergy and Applied Immunology

hn H. Burger, M.D. .... Birmingham
Chairman

lius J. Greenberg, M.D. .... Detroit
Secretary

Anesthesiology

hn T. Geneczko, M.D. .... Bay City
Chairman

hn W. Ditzler, M.D. .... Detroit
Secretary

Dermatology

ornelius VanGoor, M.D. .... Grand Rapids
Chairman

obert E. Burns, M.D. .... Detroit
Secretary

Gastroenterology

vin A. Warren, M.D. .... Detroit
Chairman

rnard M. Schuman, M.D. .... Detroit
Secretary

General Practice

rthur B. Levant, M.D. .... Detroit
Chairman

are C. Huggett, M.D. .... Lansing
Secretary

Gynecology and Obstetrics

thony T. Salvaggio, M.D. .... Harper Woods
Chairman

harles W. Aldridge, Jr., M.D. .... Grand Rapids
Secretary

Internal Medicine

rl B. Beeman, M.D. .... Grand Rapids
Chairman

verly C. Payne, M.D. .... Ann Arbor
Secretary

Neurological Surgery

. Harvey Gass, M.D. .... Detroit
Chairman

ilip J. Huber, M.D. .... Royal Oak
Secretary

Occupational Medicine

ul L. Nieswander, M.D. .... Warren
Chairman

ank G. Talbot, M.D. .... Detroit
Secretary

Ophthalmology and Otolaryngology

alph M. Fox, M.D. .... Birmingham
Chairman (Ophthalmology)

. Jan Beekhuis, M.D. .... Detroit
Co-Chairman (Otolaryngology)

Robert T. Blackhurst, M.D. .... Midland
Secretary (Ophthalomology)

Robert D. Burton, M.D. .... Grand Rapids
Co-Secretary (Otolaryngology)

Orthopedic Surgery

Eugene L. Elzinga, M.D. .... Marquette
Chairman

Richard W. Pomeroy, M.D. .... Lansing
Secretary

Pathology

John R. McDonald, M.D. .... Detroit
Chairman

Edwin M. Knights, Jr., M.D. .... Southfield
Secretary

Pediatrics

George H. Lowrey, M.D. .... Ann Arbor
Chairman

Anthony C. Gholz, M.D. .... Port Huron
Secretary

Plastic Surgery

Wallace H. Steffensen, M.D. .... Grand Rapids
Chairman

Andrew E. Stefani, M.D. .... Detroit
Secretary

Proctology

Robert F. Hague, M.D. .... Flint
Chairman

George Kinsley, M.D. .... Pontiac
Secretary

Psychiatry and Neurology

Stuart M. Finch, M.D. .... Ann Arbor
Chairman

Kenneth E. Pitts, M.D. .... Grosse Pointe
Secretary

Public Health and Preventive Medicine

Frank J. Condon, M.D. .... Royal Oak
Chairman

Gordon A. Eadie, M.D. .... Livonia
Secretary

Radiology

Douglas P. Moore, M.D. .... Grand Rapids
Chairman

Surgery

Alan P. Thal, M.D. .... Detroit
Chairman

Earl F. Wolfman, M.D. .... Ann Arbor
Secretary

Urology

Robert C. Thumann, M.D. .... Grosse Pte. Woods
Chairman

James M. Pierce, M.D. .... Detroit
Secretary

---

s of September 1, 1966

Committees of the Society

(Appointed by MSMS President C. Allen Payne, M.D.)

Advisory Committee of Past Officers *(Presidents, Speakers, and Council Chairmen)*

L. R. Leader, MD, Chairman, 3535 West 13 Mile Road, Royal Oak 48072

Otto O. Beck, MD, 308 Wabeek Building, Birmingham

William Bromme, MD, 10 Peterboro Street, Detroit 1

H. R. Carstens, MD, 6896 N. Clunbury Road, Birmingham

Henry Cook, MD, 208 Genesee Bank Building, Flint 2

B. R. Corbus, MD, 500 Fulton Street East, Grand Rapids 49503

H. H. Cummings, MD, 326 N. Ingalls, Ann Arbor

J. S. DeTar, MD, 55 West Main Street, Milan

Otto K. Engelke, MD, 313 Washtenaw County Building, Ann Arbor

H. H. Hiscock, MD, 1315 Mott Foundation Building, Flint

R. J. Hubbell, MD, Route 2, Suttons Bay

L. W. Hull, MD, 6364 Cowell Road, Brighton

K. H. Johnson, MD, 1116 Michigan National Tower, Lansing

O. J. Johnson, MD, 207 N. Walnut, Bay City

W. S. Jones, Sr., MD, 1146 Tenth Avenue, Menominee

J. E. Livesay, MD, 503 S. Saginaw Street, Flint 3

O. B. McGillicuddy, MD, 1816 Michigan National Tower, Lansing

H. J. Meier, MD, 87 West Pearl, Coldwater

R. L. Novy, MD, 855 Fisher Building, Detroit

C. I. Owen, MD, 2689 DuPont, Jacksonville, Fla.

P. A. Riley, MD, 500 S. Jackson Street, Jackson

G. B. Saltonstall, MD, 112 Clinton Street, Charlevoix

A. E. Schiller, MD, 1553 Woodward Avenue, Detroit 26

E. F. Sladek, MD, 123 E. Front Street, Traverse City

G. W. Slagle, MD, 203 Capitol, NE, Battle Creek

O. D. Stryker, MD, 43525 Elizabeth Road, Mt. Clemens

Arch Walls, MD, 116 Cretline Drive, Kalispell, Montana

D. Bruce Wiley, MD, 921 Coolidge, Apt. 3, Lansing 48912

Advisory Committee to Michigan State Medical Assistants Society

G. E. Millard, MD, Chairman, 958 Fisher Building, Detroit 48202

F. C. Cretsinger, MD, 224 E. Cedar Street, Kalamazoo

W. T. Davison, MD, 2425 Military Street, Por Huron

T. J. Trapasso, MD, 816 Ashmun Street, Sault Ste Marie

Advisory Committee to Woman's Auxiliary

B. M. Harris, MD, Chairman, 27 So. Prospect Ypsilanti

W. G. Gamble, Jr., MD, 2010 Fifth Avenue, Ba City

H. A. Scovill, MD, 1313 West Cross Street, Ypsilanti

E. E. Weston, MD, 18101 James Couzens Highwa Detroit 35

Aging

A. Hazen Price, MD, Chairman, 408 David Whi ney Building, Detroit 26

H. B. Bennett, MD, 17320 Livernois, Detroit 2

F. M. Dunn, MD, 1322 E. Michigan, Lansing

G. S. Fisher, MD, 1709 David Whitney Buildin Detroit

R. L. Fitts, MD, 50 College Avenue, SE, Gran Rapids

V. A. Getting, MD, 3532 School of Public Healt University of Michigan, Ann Arbor

P. C. Gittins, MD, 20905 Greenfield Road, Sout field

A. H. Hirschfeld, MD, 3790 Woodward, Detro 48201

C. Howard Ross, MD, 715 N. University Avenu Ann Arbor

J. F. Sanders, MD, Michigan Masonic Home, Alm

C. W. Sellers, MD, 18545 Schoolcraft Avenue, D troit 23

F. C. Swartz, MD, 720 Seymour Street, Lansing

C. A. Thompson, MD, 4211 Comstock Street, Fli 4

V. K. Volk, MD, Saginaw County Hospital, Bo 65, Saginaw

S. C. Wiersma, MD, Dept. of Physical Medicine Rehabilitation, University Hospital, Ann Arb

D. R. Smith, MD, Advisor, Box 471, Iron Mou tain 49801

Annual Session Program

. A. Towsley, MD, Chairman, W5610 University Hospital, Ann Arbor

Thomas McKean, MD, Vice Chairman, 1553 Woodward Avenue, Detroit 26

. C. Baum, MD, 153 Lafayette, SE, Grand Rapids

H. Johnson, MD, 1116 Michigan National Tower, Lansing

L. Rapport, MD, 715 Mott Foundation Building, Flint

P. Rhoades, MD, 2414 Broderick Tower, Detroit 26

M. Sheldon, MD, W5610 University Hospital, Ann Arbor

B. Winslow, MD, 710 North Avenue, Battle Creek

Blood Banks

W. Gardner, MD, Chairman, 6070 West Outer Drive, Detroit

D. Cecconi, MD, Commercial Bank Building, Iron Mountain

. G. Gamble, Jr., MD, 2010 Fifth Avenue, Bay City

Dell Henry, MD, 706 W. Huron Street, Ann Arbor

C. Heinmiller, MD, Saginaw General Hospital, Saginaw

A. Humphrey, MD, 175 College Street, Battle Creek

N. Kuehn, MD, 20203 Wellesley Blvd., Birmingham

L. Mainwaring, MD, 1910 Russell, Dearborn

L. Nalbandian, MD, Wm. Beaumont Hospital, Royal Oak 48073

lius Rutsky, MD, St. Joseph Mercy Hospital, Pontiac

H. Venier, MD, 544 Division, East Lansing

n Young, MD, 705 Cooper Street, Saginaw

Cancer

E. Dodds, MD, Chairman, 625 S. Grand Traverse, Flint

lliam Bromme, MD, 318 Professional Building, Detroit 48201

nces E. Bull, MD, University Hospital, Ann Arbor

W. Colwell, MD, 328 S. Saginaw Street, Flint 3

n A. Cowan, MD, Michigan Dept. of Public Health, 3500 N. Logan, Lansing

E. Fulton, Jr., MD, 2425 Military Street, Port Huron

E. Kelly, MD, 2765 Flushing Road, Flint

J. W. Landers, MD, William Beaumont Hospital, Royal Oak 48073

R. M. Nalbandian, MD, William Beaumont Hospital, Royal Oak 48073

H. M. Nelson, MD, 1067 Fisher Building, Detroit 48202

J. C. Nixon, MD, 2144 Georgetown Blvd., Ann Arbor

C. Allen Payne, MD, 1840 Wealthy Street, SE, Grand Rapids

R. H. Puite, MD, 515 Lakeside Drive, SE, Grand Rapids

D. L. Rousseau, MD, Monitor Leader Building, Mt. Clemens

R. I. Shapiro, MD, 22341 West 8 Mile Road, Detroit

O. D. Stryker, MD, 43525 Elizabeth Road, Mt. Clemens

R. W. Talley, MD, Henry Ford Hospital, Detroit 2

P. L. Trump, MD, 808 Terrace, Kingsford

V. K. Vaitkevicius, MD, 4160 John R, Detroit

H. J. VandenBerg, Jr., MD, 1553 Woodward Avenue, Detroit 26

Cardiac Disease Control

S. E. Chapin, MD, Chairman, 125 N. Military, Dearborn 7

D. G. Albert, MD, 1665 Twelve Mile Road, Berkley

J. G. Bielawski, MD, 5829 Golfview Drive, Dearborn Heights 48127

L. H. Birch, MD, 100 Michigan Street, NE, Grand Rapids

F. J. Chapin, MD, 366 Killarney Beach Rd., Bay City 48706

R. E. Fisher, MD, 1501 W. Michigan Avenue, Battle Creek

R. J. Gerard, MD, 2419 Mackinaw, Saginaw

N. J. Hershey, MD, P.O. Box 222, Niles

D. J. Jacobs, MD, Ochiette Building, Iron Mountain

F. D. Johnson, MD, 1101 S. Mission, Mt. Pleasant

M. C. Kozonis, D, 880 Woodward Avenue, Pontiac

J. M. Miller, MD, 1010 Griswold Street, Port Huron

R. E. Reichert, Jr., MD, 326 N. Ingalls, Ann Arbor

R. M. Taylor, MD, Burns Clinic, Petoskey

H. R. Weisheit, MD, Route 1, Sturgis

Mr. Abraham Brickner, Advisor, 13100 Puritan, Detroit 27

J. A. Cowan, MD, Advisor, Mich. Dept. of Public Health, 3500 N. Logan, Lansing

Mr. James Gerity, Jr., Advisor, Deer Park, Adrian

Committees of the Society/Continued

Child Welfare

J. M. Dorsey, Jr., MD, Chairman, 21815 Southfield Road, Birmingham

F. J. Margolis, MD, Vice Chairman, 2901 S. West-Nedge Avenue, Kalamazoo 49001

R. T. Blackhurst, MD, Blackhurst Building, Midland

R. C. Deming, MD, 724 W. Franklin, Jackson

R. M. Goethe, MD, 110 W. Sugnet, Midland

Alfred Hamady, MD, 1018 N. Avenue, Battle Creek

R. M. Heavenrich, MD, 1107 Gratiot Avenue, Saginaw

Gertrude E. Howe, MD, Michigan Dept. of Public Health, 3500 N. Logan, Lansing

H. T. Knobloch, MD, 1102 Columbus, Bay City

W. Kaye Locklin, MD, 1141 S. Rose Street, Kalamazoo 49001

R. M. Lugg, MD, 619 River Street, Port Huron

W. J. Morrow, MD, 119 N. James Street, Ludington

Irving Posner, MD, 18111 Muirland Avenue, Detroit

R. G. Rice, MD, 252 Hollister Building, Lansing

I. J. Roggen, MD, 1227 N. Michigan, Saginaw

R. H. Trimby, MD, 1322 E. Michigan Avenue, Lansing

J. R. Wilson, MD, 1033 Fulton Street, West, Grand Rapids

R. J. Mason, MD, Advisor, 618 N. Woodward Avenue, Birmingham 48011

Diabetes

W. M. LeFevre, MD, Chairman, 315 W. Clay Avenue, Muskegon

K. K. Vining, Jr., MD, Vice Chairman, 515 Lakeside Drive, SE, Grand Rapids

E. R. Addison, MD, 412 Superior Avenue, Crystal Falls

W. L. Anderson, MD, 1553 Woodward Avenue, Detroit 26

R. W. Brown, MD, 231 North Avenue, Battle Creek 49017

J. B. Bryan, MD, 4045 West 13 Mile Road, Royal Oak

J. A. Cowan, MD, Michigan Dept. of Public Health, 3500 N. Logan, Lansing

E. W. Fitzgerald, Jr., MD, 1102 Sixth Street, Port Huron

N. H. Harebottle, MD, Fowlerville

H. D. Kaine, MD, 3011 W. Grand Blvd., Detroit 2

J. E. Kincaid, MD, 1634 Gull Road, Kalamazoo 49001

T. O. Lohr, MD, 1135 N. Michigan Avenue, Saginaw

J. B. Rowe, MD, 653 Saginaw Street, Flint 3

F. W. Whitehouse, MD, 2799 W. Grand Blvd., Detroit 2

Governmental Medical Care Programs

	Term
P. T. Lahti, MD, Chairman, 3600 West 13 Mile Road, Royal Oak	1969
J. C. Benson, MD, 402 West 2nd Street, Flint 3	1969
F. C. Brace, MD, 1498 Lake Drive, SE, Grand Rapids 6	1967
Otto K. Engelke, MD, 313 Washtenaw County Building, Ann Arbor	1968
W. H. Huron, MD, 106 West B Street, Iron Mountain	1967
T. V. Kretschmer, MD, 1232 N. Michigan Avenue, Saginaw	1969
R. L. Mainwaring, MD, 1910 Russell, Dearborn	1967
D. N. Sweeny, Jr., MD, 8445 E. Jefferson, Detroit 14	1968
R. E. Wunsch, MD, 1122 E. Front Street, Traverse City 49684	1968

Highway Accident Prevention

P. W. Gikas, MD, Chairman, Veterans Hospital Ann Arbor

G. H. Agate, MD, Michigan Dept. of Publi Health, 3500 N. Logan, Lansing

G. D. Albers, MD, 203 Paris Avenue, SE, Grand Rapids 3

R. T. Blackhurst, MD, Blackhurst Building, Midland

T. N. Cline, MD, 999 Sixth, Traverse City

C. D. Conrad, MD, 3027 N. Woodward Avenue Royal Oak

R. C. Deming, MD, 724 W. Franklin, Jackson

A. F. Dundon, MD, Box C, Traverse City

C. M. Hansen, MD, Stanton

A. F. Milford, MD, 7 W. Michigan Avenue, Yps lanti 48197

R. E. Rowe, MD, 3360 W. Water Street, Port Huron

E. M. Schneider, MD, Upjohn Company, Kalama zoo

H. M. Smathers, MD, 14219 W. McNichols, Detroit 35

F. V. Wade, MD, 1121 Mott Foundation Building Flint

J. R. Rodger, MD, Advisor, Bellaire

Iodized Salt

. E. Brush, MD, Chairman, 2799 W. Grand Blvd., Detroit
. H. Beierwaltes, MD, Dept. of Internal Medicine, University Hospital, Ann Arbor
. M. Henderson, MD, 109 W. Erie, Albion
. L. Isbister, MD, Mich. Dept. of Public Health, 3500 N. Logan, Lansing
. E. Fuller, MD, 515 Lakeside Drive, SE, Grand Rapids 6
. B. Levagood, MD, 224 Professional Building, Detroit 1
artin Patmos, MD, 252 E. Lovell, Kalamazoo
. F. Powers, MD, 1600 N. Michigan, Saginaw
. L. Waggoner, MD, Professional Building, St. Louis

Legal Affairs

tto K. Engelke, MD, Chairman, 313 Washtenaw County Building, Ann Arbor
. T. Mulligan, MD, Vice Chairman, 612 Monitor Leader Building, Mt. Clemens
. T. Anderson, MD, 408 Hamilton Avenue, Kingsford
. J. Arrington, MD, 7811 Oakland Avenue, Detroit 48211
. V. Bass, MD, 3322 Davenport, Saginaw
. L. Block, MD, 3001 Miller Road, Dearborn
. C. Brace, MD, 1498 Lake Drive, SE, Grand Rapids
. O. Creager, MD, 1218 Bronson Circle, Kalamazoo
. F. Falls, MD, 1313 E. Ann Street, Ann Arbor
eon Fill, MD, Executive Suite, 2310 Cass, Detroit
. M. Gould, Jr., MD, Mercywood Hospital, Box 65, Ann Arbor
. W. Greene, Jr., MD, 515 Lakeside Drive, SE, Grand Rapids 6
. M. Harris, MD, 27 So. Prospect, Ypsilanti
. Freeman Hersey, MD, 1215 Oakland Drive, Kalamazoo
. H. Hiscock, MD, 1315 Mott Foundation Building, Flint
. H. Johnson, MD, 1116 Michigan National Tower, Lansing
. J. Johnson, MD, 207 N. Walnut, Bay City
. T. Lahti, MD, 3600 West 13 Mile Road, Royal Oak
. R. Leader, MD, 3535 West 13 Mile Rd., Royal Oak 48072
. J. Mason, MD, 618 N. Woodward Avenue, Birmingham 48011
arjorie P. Meyers, MD, 5320 John R. Street, Detroit 2
O. B. McGillicuddy, MD, 1816 Michigan National Tower, Lansing
F. P. McQuillan, MD, 611 Center Street, Jackson
G. E. Moore, MD, 323 W. Second, Flint 3
B. A. O'Hora, MD, 110 W. Sugnet Road, Midland
R. E. Reagan, MD, 232 Windsor, Benton Harbor
Eleanor P. Skufis, MD, 201 Orchard Road, Adrian 49221
J. M. Stack, MD, 310 Warwick, Alma
L. W. Walker, MD, 1210 W. Saginaw Street, Lansing
Mr. A. Stewart Kerr, Advisor, 1600 Dime Building, Detroit

Maternal Health

W. W. Jack, MD, Chairman, 1810 Wealthy Street, SE, Grand Rapids
J. E. Harryman, MD, Vice Chairman, 1200 Ransom Street, Muskegon
F. W. Bald, MD, 410 S. Ballenger, Flint 3
C. M. Bell, MD, 50 College Avenue, SE, Grand Rapids
T. N. Evans, MD, Hutzel Hospital, 432 E. Hancock, Detroit 48201
W. A. Fishbeck, MD, 1209 E. Eighth, Traverse City
E. C. Galsterer, MD, 128 S. Jefferson Avenue, Saginaw
A. D. Harris, MD, 12815 Linwood, Detroit 38
L. P. Heath, MD, 1553 Woodward, Detroit 26
R. V. Hill, MD, 117 Spring Street, Three Rivers
G. W. Lakke, MD, 163 North Avenue, Battle Creek
F. A. Locke, MD, 755 High Street, Adrian
V. A. Marks, MD, 2706 Louanna, Midland
R. T. Mellis, MD, 516 Whites Road, Kalamazoo
H. E. Malcolm, MD, 1005 Abbott Road, East Lansing 48823
W. R. Moore, MD, 17800 East 8 Mile Road, Detroit 36
R. P. Nanzig, MD, 153 Lafayette, SE, Grand Rapids 3
H. A. Ott, MD, 3019 N. Woodward Avenue, Royal Oak
W. G. Pearson, MD, 211 Savings Bank Building, Marquette
J. R. Postle, MD, Burns Clinic, Petoskey
R. G. Rice, MD, 252 Hollister Building, Lansing
A. C. Rutzen, MD, 1296 Lenox, Bloomfield Hills 48013
W. A. Schmutzler, MD, 373 Woodward Street, Iron Mountain
V. N. Slee, MD, 201 S. Main Street, Ann Arbor
C. S. Stevenson, MD, 960 Fisher Building, Detroit 48202

L. B. Stevenson, MD, Henry Ford Hospital, Detroit 2

A. J. Telego, MD, 2505 Fletcher Drive, NE, Grand Rapids 6

J. W. Thompson, MD, 2702 Flushing Road, Flint 4

J. H. Tisdel, MD, 310 E. Water Street, Port Huron

H. C. Visscher, MD, 515 Lakeside Drive, SE, Grand Rapids

J. R. Willson, MD, Dept. of Ob-Gyn, University Hospital, Ann Arbor

C. H. Wright, MD, 50 Westminister, Detroit 2

D. F. Woomer, MD, 1227 N. Michigan Avenue, Saginaw

H. A. Ziel, Jr., MD, Michigan Dept. of Public Health, 3500 N. Logan, Lansing

C. A. Behney, MD, Honorary Member, P.O. Box 4256, San Jose Drive, Bisbee, Arizona

G. B. Corneliuson, MD, Honorary Member, c/o Stanley Corneliuson, Hooperlake Road, Ishpeming 49849

F. A. Jones, MD, Honorary Member, 815 Royal Palms Place, Vero Beach, Fla.

Mary Lou Byrd, MD, Consultant, 700 Kent Hills Drive, NE, Grand Rapids

A. James French, MD, Consultant, 1313 E. Ann Street, Ann Arbor

P. J. Howard, MD, Consultant, Henry Ford Hospital, Detroit 2

J. M. Weller, MD, Consultant, 2508 Londonderry Road, Ann Arbor

Medical Socio-Economics

	Term
D. L. Kessler, MD, Chairman, 1610 Robinson Road, SE, Grand Rapids	1968
S. E. Chapin, MD, 125 N. Military Street, Dearborn 7	1967
J. G. Slevin, MD, 1132 Whittier Avenue, Grosse Pte. Park	1967
R. V. Taylor, MD, 517 Wildwood Avenue, Jackson	1967
B. J. Sweeney, MD, 1100 Sixth St., Traverse City	1969
R. J. Toteff, MD, 2110 Morson, Saginaw	1968
R. D. Warnke, MD, 1631 Gull Road, Kalamazoo	1969

J. J. Coury, MD, Advisor, 1209 Tenth Street, Port Huron

H. F. Falls, MD, Advisor, 1313 E. Ann Street, Ann Arbor

J. J. Lightbody, MD, Advisor, 501 David Whitney Building, Detroit 48226

R. J. Mason, MD, Advisor, 618 N. Woodward Avenue, Birmingham 48011

O. B. McGillicuddy, MD, Advisor, 1816 Michigan National Tower, Lansing

Medicine and Osteopathy

J. J. Coury, MD, Chairman, 1209 Tenth Street, Port Huron

J. R. Doty, MD, 315 Clay Street, Lapeer

E. J. Geist, MD, 1500 Walton, Rochester

O. J. Johnson, MD, 207 N. Walnut, Bay City

A. B. Levant, MD, 15715 E. Warren, Detroit 24

B. L. Masters, MD, 111 W. Dayton, Fremont

F. H. Power, MD, 116 Cass Street, Traverse City

Douglas Sherk, MD, 412 Superior, Crystal Falls

E. G. Siegfried, MD, 229 S. Gratiot Avenue, Mt. Clemens

J. G. Slevin, MD, 1132 Whittier Avenue, Grosse Pte. Park

E. J. Tallant, MD, 18401 Greenfield, Detroit 35

H. Clay Tellman, MD, 315 W. Clay Avenue, Muskegon

C. L. Weston, MD, Matthews Building, Owosso

E. S. Woodworth, MD, 1200 Byron Road, Howell

E. D. Gardner, MD, Advisor, Wayne State University School of Medicine, Detroit

W. N. Hubbard, Jr., MD, Advisor, University of Michigan School of Medicine, Ann Arbor

A. D. Hunt, MD, Advisor, Michigan State University College of Human Medicine, East Lansing

Mr. A. Stewart Kerr, Advisor, 1600 Dime Building, Detroit

Mental Health

Benjamin Jeffries, MD, Chairman, 19959 Vernier Road, Harper Woods 48236

E. H. Rodda, MD, Vice Chairman, 101 W. John Street, Bay City

Victor Azuela, MD, 185 North Washington, Battle Creek

Z. S. Bohn, MD, 327 Professional Building, Detroit

P. N. Brown, MD, Route 4, Milford 48042

J. A. Churchill, MD, Lafayette Clinic, Detroit

R. B. Clarke, MD, 76 W. Adams Avenue, Detroit 26

J. M. Dorsey, Sr., MD, 65 Moss Street, Highland Park

J. R. Doty, MD, 315 Clay Street, Lapeer

S. M. Gould, Jr., MD, Mercywood Hospital, Box 65, Ann Arbor

J. S. Gottlieb, MD, 951 E. Lafayette, Detroit 7

A. L. Hughett, MD, 19959 Vernier Road, Harper Woods 48236
J. J. Llinas, MD, Ingham Medical Hospital, 405 Greenlawn, Lansing
P. A. Martin, MD, 857 Fisher Building, Detroit 2
K. T. McGunegle, MD, Sandusky
H. A. Raskin, MD, 18510 Meyers Road, Detroit 35
D. D. Salon, MD, 1030 Sixth, Traverse City
M. Duane Sommerness, MD, Box C, Traverse City
W. S. Wille, MD, 5325 Brown Lake Road, Jackson
W. J. Wertz, MD, 2033 Park, Detroit 26
R. A. Kimmich, MD, Advisor, Michigan Dept. of Mental Health, Lewis Cass Building, Lansing

Occupational Health

William Jend, Jr., MD, Chairman, 1365 Cass Avenue, Detroit
D. L. Block, MD, 3001 Miller Road, Dearborn
T. I. Boileau, MD, 2075 East 14 Mile Road, Birmingham
L. E. Filkin, MD, 621 Fairbrook, Northville
H. L. Gordon, MD, Dow Chemical Company, Midland
A. E. Heustis, MD, Michigan Dept. of Public Health, 3500 N. Logan, Lansing
E. A. Irvin, MD, Ford Motor Company, The American Road, Dearborn
M. W. Jocz, MD, 945 Trombley Road, Detroit 30
H. J. Kreulen, MD, 2452 Godwin, SE, Grand Rapids 7
H. J. Magnuson, MD, 1634 University Medical Center, Ann Arbor
P. F. Nowosielski, MD, 14390 Blackburn, Livonia 48154
F. L. Purcell, MD, Ternstedt Plant, Flint 5
J. J. Ronayne, Jr., MD, 16345 W. McNichols Road, Detroit 35
O. J. Preston, MD, 300 N. Chevrolet Avenue, Flint 2
L. W. Staudt, MD, 1201 Pilgrim, Birmingham
S. D. Steiner, MD, 3044 W. Grand Blvd., Detroit 2
E. E. Weston, MD, 18101 James Couzens Highway, Detroit 35
H. C. Hansen, MD, Advisor, 417 Post Building, Battle Creek

Postgraduate Medical Education

	Term
H. A. Towsley, MD, Chairman, W5610 University Hospital, Ann Arbor	
J. R. Heidenreich, MD, Vice Chairman, Daggett	1968
R. J. Bing, MD, 1401 Rivard Street, Detroit 7	1968
R. W. Emerick, MD, Box 147, Fremont 49412	1967
Otto K. Engelke, MD, 313 Washtenaw County Bldg., Ann Arbor	1967
T. N. Evans, MD, Hutzel Hospital, 432 E. Hancock, Detroit	1969
A. Martin Lerner, MD, 1400 Chrysler Expressway, Detroit 48207	1969
D. S. MacIntyre, MD, 515 Lakeside Drive, SE, Grand Rapids	1967
R. M. Stow, MD, 2909 E. Grand River, Lansing	1968
N. A. Vanselow, MD, 1532 Warwick, Ann Arbor	1967
A. J. Walt, MD, Detroit Receiving Hospital, Detroit	1968
S. B. Winslow, MD, 710 North Avenue, Battle Creek	1969
J. A. Witter, MD, 344 Glendale Avenue, Highland Park 3	1969

E. D. Gardner, MD, Advisor, Wayne State University School of Medicine, Detroit
A. E. Heustis, MD, Advisor, Michigan Dept. of Public Health, 3500 N. Logan, Lansing
W. N. Hubbard, Jr., MD, Advisor, University of Michigan School of Medicine, Ann Arbor
A. D. Hunt, MD, Advisor, Michigan State University College of Human Medicine, East Lansing
F. P. Rhoades, MD, Advisor, 2414 Broderick Tower, Detroit 26
C. Howard Ross, MD, Advisor, 715 N. University Avenue, Ann Arbor
J. M. Sheldon, MD, Advisor, W5610 University Hospital, Ann Arbor

Professional Insurance Plans

Fredrick Weissman, MD, Chairman, Suite 602, Northland Medical Building, Southfield
A. A. Humphrey, MD, 175 College Street, Battle Creek
Mr. A. Stewart Kerr, 1600 Dime Building, Detroit
S. H. Levy, MD, 10601 West 7 Mile Road, Detroit 21
M. D. MacQueen, MD, 660 Woodward Avenue, Detroit 26
C. S. Rogers, MD, 101 W. John Street, Bay City
H. F. Falls, MD, Advisor, 1313 E. Ann Street, Ann Arbor

Public Health

O. D. Stryker, MD, Chairman, 43525 Elizabeth Road, Mt. Clemens
W. N. Hayes, MD, 720 N. Main Street, Norway
A. E. Heustis, MD, Michigan Dept. of Public Health, 3500 N. Logan, Lansing
A. A. Humphrey, MD, 175 College Street, Battle Creek

R. M. Jarvi, MD, 1107 Gratiot Avenue, Saginaw
J. P. Klein, MD, Box 111, Fremont 49412
W. B. Long, MD, Homer

Public Relations

Brock E. Brush, MD, Chairman, 2799 W. Grand Blvd., Detroit
H. C. Tellman, MD, Vice Chairman, 315 W. Clay Avenue, Muskegon
J. W. Bunting, MD, 110 N. First Avenue, Alpena
D. N. Fitch, MD, 804 Ludington Street, Escanaba
H. T. Forsyth, MD, 137 S. Saginaw, Chesaning
W. R. Gladstone, Jr., MD, 804 Main, Norway
Jean Dace Golden, MD, 304 Washington Street, Monroe
C. M. Hanson, MD, 403 Bronson Medical Center, Kalamazoo
D. Bonta Hiscoe, MD, 2909 E. Grand River, Lansing
S. L. Hoffman, MD, 1200 Byron Road, Howell
David Kahn, MD, 2909 E. Grand River, Lansing
Lawrence S. Lackey, MD, 525 Visger, Ecorse
J. L. Leach, MD, 5014 N. Saginaw Street, Flint
R. F. McNeill, MD, 119 Kercheval, Grosse Pte.
Georgia Mills, MD, 909 Clark Street, Mesick
J. W. Moses, MD, 754 Fisher Building, Detroit
J. P. Muldoon, MD, 72 Sheldon Avenue, SE, Grand Rapids
C. L. Oppy, MD, Roscommon
R. C. Prophater, MD, 202 Boehringer Court, Bay City
S. R. Russell, MD, 210 E. Walker, St. Johns
H. A. Scovill, MD, 1313 W. Cross Street, Ypsilanti
J. J. Snider, MD, 2425 Military, Port Huron

Respiratory Diseases

R. A. Rasmussen, MD, Chairman, 1810 Wealthy Street, SE, Grand Rapids
L. F. Hayes, MD, Vice Chairman, Gaylord
J. R. Acocks, MD, Morgan Heights, Marquette
E. V. Bridge, MD, 416 Edison Blvd., Port Huron
M. B. Conover, MD, 724 East Street, Flint 3
W. N. Davey, MD, 1405 E. Ann Street, Ann Arbor
J. L. Isbister, MD, Michigan Dept. of Public Health, 3500 N. Logan, Lansing
A. H. Kempter, MD, 1200 Lake Drive, SE, Grand Rapids
E. J. Klopp, MD, 173 College Street, Battle Creek
G. H. Phillips, MD, Tuberculosis Sanatorium, Jackson
C. J. Stringer, MD, 1322 E. Michigan Avenue, Lansing
R. D. Swedenburg, MD, 1470 Peck, Muskegon
A. F. Turcke, MD, 5717 Marja Street, Flint 5
G. B. Wickstrom, MD, 529 Clark Avenue, Owosso
S. A. Yannitelli, MD, 710 North Ave., Battle Creek

Rural Medical Service

R. E. Rice, MD, Chairman, P.O. Box 271, Greenville
F. C. Brace, MD, 1498 Lake Drive, SE, Grand Rapids 6
P. R. Chisena, MD, 6221 Dixie, Bridgeport
T. J. Dillon, MD, RFD 3, Paw Paw
G. J. Kemme, MD, RFD 3, Zeeland
D. R. McCorvie, MD, Williamston Medical Building, Williamston
R. W. Phillips, MD, Hamburg
R. W. Spalding, MD, Box 187, Bloomingdale
R. E. Stelle, MD, 412 Superior, Crystal Falls
B. L. Masters, MD, Advisor, 111 W. Dayton, Fremont

Scientific Radio and Television

J. R. G. Gosling, MD, Chairman, 315 Corrie Road, Ann Arbor
A. J. Walt, MD, Vice Chairman, Detroit Receiving Hospital, Detroit
S. J. Behrman, MD, 1313 E. Ann Street, Ann Arbor
A. D. Hunt, MD, Michigan State University, College of Human Medicine, East Lansing
G. H. Lowrey, MD, University Hospital, Ann Arbor
N. M. Taylor, MD, 215 Dean Lane, Grosse Pte. Park 36

Venereal Disease Control

Benjamin Schwimmer, MD, Chairman, Detroit Social Hygiene Clinic, Building 7, 8811 John Lodge Expressway, Detroit 2
M. W. Alcorn, MD, 1420 Center Avenue, Bay City
F. B. Bicknell, MD, 938 David Whitney Building, Detroit 26
R. E. Burns, MD, Henry Ford Hospital, Detroit
J. A. Cowan, MD, Michigan Dept. of Public Health, 3500 N. Logan, Lansing
A. C. Curtis, MD, University Hospital, Ann Arbor
R. G. Graff, MD, 515 Lakeside Drive, SE, Grand Rapids
S. D. Kobernick, MD, 6767 W. Outer Drive, Detroit 35
F. B. Levagood, MD, 224 Professional Building, Detroit 1
R. L. Mainwaring, MD, 1910 Russell, Dearborn
J. C. Mooney, MD, 1600 N. Michigan, Saginaw
R. S. Ryan, MD, 13155 Washington, Saginaw
Joan C. Stryker, MD, 21604 E. River Road, Grosse Ile
H. O. Thompson, MD, 6014 W. Fort Street, Detroit

Committees of The Council

Standing Committees

County Societies

H. Hiscock, MD, Chairman, 1315 Mott Foundation Bldg., Flint

Finance

. K. Whiteley, MD, Chairman, 608 Eastland Center Professional Bldg., Detroit 48236

Publication

. L. Masters, MD, Chairman, 111 W. Dayton Street, Fremont

Education Liaison

Don Marshall, MD, Chairman, 301 Bronson Medical Center, Kalamazoo

Paramedical Education Subcommittee (of Education Liaison)

H. J. Meier, MD, Chairman, 87 West Pearl, Coldwater

Advisory to Executive Director

R. J. Mason, MD, Chairman, 618 N. Woodward Avenue, Birmingham 48011

Established 1924

MERCYWOOD HOSPITAL

4038 Jackson Road — *Conducted by Sisters of Mercy* — Ann Arbor, Michigan

Telephone — 313 663-8571

Mercywood Hospital is a private neuro-psychiatric hospital licensed by the Michigan Department of Mental Health. Mercywood specializes in intensive, multidisciplinary treatment for emotional and mental disorders.

Accredited by the Joint Commission on Accreditation of Hospitals and the National League of Nursing. A full Blue Cross participating hospital.

Certified for: Medicare and M.A.A. programs.

PSYCHIATRIC STAFF

Robert J. Bahra, M.D.
Dean P. Carran, M.D.
Francis M. Daignault, M.D.
Gordon C. Dieterich, M.D.
Stuart M. Gauld, Jr., M.D.
Leonard E. Himler, M.D.
Stephen C. Mason, M.D.
Richard D. Watkins, M.D.
Rudolf E. Nobel, M.D.
Sydney Joseph, M.D.
James R. Driver, M.D.

INGRAM'S SERVICE DEPARTMENT

ALL FACTORY TRAINED MEN

We service Medical Equipment, Electrocardiographs, Basal Metabalors, Sterilizers, Autoclaves, Diathermy Outfits, Cutting Units, Ultra Violet Lamps, Hydro Therapy Units, Laboratory Equipment. ALL BURDICK, LIEBEL FLARSHEIM AND RITTER EQUIPMENT.

If you have any Service problems, please call us at TE 2-4444, ask for the SERVICE DEPARTMENT and we will gladly help in any way we can.

THE G. A. INGRAM COMPANY

4444 Woodward Avenue — TEmple 2-4444 — Detroit, Michigan 48201

Committees of the Council: Liaison Committees

Liaison With Michigan Crippled Children Committee

A. C. Stander, MD, Chairman, 1411 Court Street, Saginaw

C. H. Frantz, MD, 1810 Wealthy Street, SE, Grand Rapids

L. E. Heideman, MD, 20211 Greenfield Road, Detroit 35

R. M. Leitch, MD, 401 Ann Street, Union City

Frank Van Schoick, MD, 2100 4th Street, Jackson 49203

Liaison With Michigan Hospital Service

R. J. Mason, MD, 618 N. Woodward Avenue, Birmingham 48011

C. Allen Payne, MD, 1840 Wealthy Street, SE, Grand Rapids

R. V. Taylor, MD, 517 Wildwood Ave., Jackson

Liaison With Michigan State Pharmaceutical Association

R. V. Daugharty, MD, Chairman, 107 N. Mitchell, Cadillac

H. C. Hansen, MD, 417 Post Building, Battle Creek

H. W. Harris, MD, 609 N. Washington, Lansing

E. H. Rodda, MD, 101 W. John Street, Bay City

Liaison With Residents, Interns and Medical Students

N. D. Henderson, MD, Chairman, 726 Abbott Road, East Lansing

G. H. Bauer, MD, 2015 Manchester Road, Ann Arbor

C. E. Booher, MD, 1810 Wealthy Street, SE, Grand Rapids

K. L. Krabbenhoft, MD, 3825 Brush Street, Detroit

J. D. McAlindon, MD, 1601 Euclid, Flint

J. M. Pierce, Jr., MD, Wayne State University, Detroit

C. Howard Ross, 715 N. University Avenue, Ann Arbor

D. F. Woomer, MD, 1227 N. Michigan Avenu Saginaw

Liaison With State Bar of Michigan

W. M. LeFevre, MD, Chairman, 315 W. Cl Avenue, Muskegon

A. A. Humphrey, MD, 175 College Street, Batt Creek

Mr. A. Stewart Kerr, 1600 Dime Building, Detro

D. M. LeDuc, MD, 1322 E. Michigan, Lansin 48912

F. B. MacMillan, MD, 1553 Woodward Avenu Detroit 48226

H. D. McEachran, MD, 500 Stephenson Avenu Iron Mountain

H. J. Meier, MD, 87 West Pearl, Coldwater

Liaison With State Board of Registration in Medicine

K. H. Johnson, MD, Chairman, 1116 Michig National Tower, Lansing

J. B. Blodgett, MD, 76 West Adams Street, D troit 48226

O. J. Johnson, MD, 207 N. Walnut, Bay City

L. R. Leader, MD, 3535 West 13 Mile Roa Royal Oak 48072

Liaison With State Executive Office

K. H. Johnson, MD, Chairman, 1116 Michig National Tower, Lansing

B. M. Harris, MD, Vice Chairman, 27 So. Pr pect, Ypsilanti

Otto K. Engelke, MD, 313 Washtenaw Coun Building, Ann Arbor

L. R. Leader, MD, 3535 West 13 Mile Roa Royal Oak 48072

J. J. Lightbody, MD, 501 David Whitney Buil ing, Detroit 48226

R. J. Mason, MD, 618 N. Woodward Avenu Birmingham 48011

C. Allen Payne, MD, 1840 Wealthy Street, S Grand Rapids

Mr. Hugh W. Brenneman, Advisor, 120 We Saginaw, East Lansing

Other Committees

Alcoholism and Drug Addiction

C. K. Stroup, MD, Chairman, 2002 E. Court Street, Flint 3

Victor Azuela, MD, 185 N. Washington, Battle Creek

R. C. Bates, MD, 2909 E. Grand River, Lansi

D. J. Cady, MD, 2002 Court Street, Saginaw

A. S. Church, MD, 19570 Bretton Drive, Detro 23

D. L. Damstra, MD, Brighton Hospital, Bright

. H. Gay, MD, Dow Chemical Company, Midland

J. Llinas, MD, Ingham Medical Hospital, 405 Greenlawn, Lansing

. F. Moench, MD, 147 Center Street, Sanford

. A. Raskin, MD, 18510 Meyers Road, Detroit 35

. L. Selzer, MD, 1201 Red Oak Road, Ann Arbor

Awards

. J. Meier, MD, Chairman, 87 West Pearl, Coldwater

. R. Leader, MD, 3535 West 13 Mile Road, Royal Oak

J. Lightbody, MD, 501 David Whitney Building, Detroit 48226

. B. McGillicuddy, MD, 1816 Michigan National Tower, Lansing

. Allen Payne, MD, 1840 Wealthy Street, SE, Grand Rapids

Beaumont Memorial

. J. Mason, MD, Chairman, 618 N. Woodward Avenue, Birmingham 48011

tto O. Beck, MD, Honorary Chairman, 308 Wabeek Building, Birmingham

. M. Harris, MD, 27 So. Prospect, Ypsilanti

. M. LeFevre, MD, 315 W. Clay Avenue, Muskegon

. H. Whittaker, MD, 17000 E. Jefferson Ave., Grosse Pte. 30

Courses on Medical Economics and Ethics

. O. Kraft, MD, Chairman, 2355 E. Stadium Blvd., Ann Arbor

. A. Towsley, MD, Vice Chairman, W5610 University Hospital, Ann Arbor

. J. Walt, MD, Vice Chairman, Detroit Receiving Hospital, Detroit

. E. L. Berry, MD, 715 Mott Foundation Building, Flint

. D. Gardner, MD, Wayne State University School of Medicine, Detroit

. N. Hubbard, Jr., MD, University of Michigan School of Medicine, Ann Arbor

. Howard Ross, MD, 715 N. University Avenue, Ann Arbor

. W. Royer, MD, 1331 W. Michigan Avenue, Battle Creek

. M. Sheldon, MD, W5610 University Hospital, Ann Arbor

. J. Toteff, MD, 2110 Morson, Saginaw

. B. Winslow, MD, 710 North Avenue, Battle Creek

. A. Witter, MD, 344 Glendale Avenue, Highland Park 3

Disaster Medical Care

C. P. Anderson, MD, Chairman, 16100 Warwick, Detroit 48219

Gordon Eadie, MD, Eastern Upper Peninsula Health Dept., Newberry 49868

D. H. Fryer, MD, Michigan Dept. of Public Health, 3500 N. Logan, Lansing

M. L. Lichter, MD, 2900 Oakwood Blvd., Melvindale

W. B. Prothro, MD, 1619 Walker Street, NW, Grand Rapids

E. F. Kickham, MD, 705 Adams Street, Saginaw

C. J. Sprunk, MD, 2900 Oakwood Blvd., Melvindale

M. E. Wehner, MD, 131 River Street, Manistique

George E. Bowler, DVM, Advisor, 1315 Arbor View Blvd., Ann Arbor

E. Louise Crosby, RN, Advisor, P.O. Box 2323, Lansing

Mr. Robert C. Johnson, Advisor, 1812 Michigan National Tower, Lansing

Leon V. Luke, DDS, Advisor, 201½ E. Grand River, East Lansing

Mr. Wm. A. Merdel, Advisor, 1084 Penobscot Building, Detroit

Eye Care

R. T. Blackhurst, MD, Chairman, Blackhurst Building, Midland

E. L. Cooper, MD, 4200 N. Woodward Avenue, Royal Oak

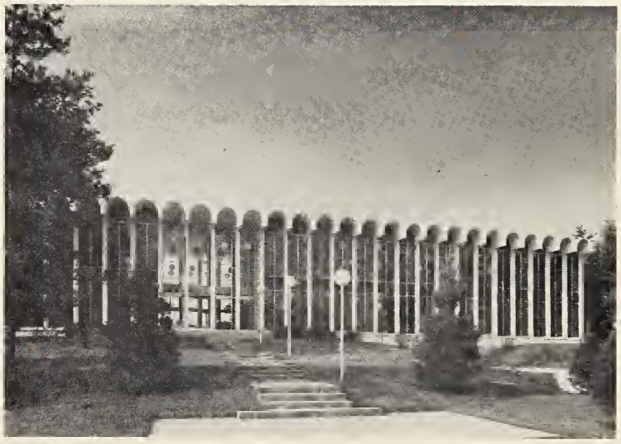
Don Marshall, MD, 301 Bronson Medical Center, Kalamazoo

A. E. Schultz, MD, 303 Abbott Road, East Lansing

J. L. Sleight, MD, 2909 E. Grand River, Lansing

Hospital Relations

(To be appointed)



Committee of The Council/Continued

International Health

H. A. Branch, MD, Chairman, 821 Mott Foundation Building, Flint
Nancy C. Caputo, MD, 17712 Mack, Grosse Pte.
J. A. Grady, MD, 946 Three Mile Road, Detroit 30
M. F. Jones, MD, 2909 E. Grand River, Lansing
J. C. Leshock, MD, 701 N. Logan Street, Suite 205, Lansing 48915
Alice Palmer, MD, 810 David Whitney Bldg., Detroit 48226
J. C. Rawling, MD, 115 Medical Arts Building, Flint 4
A. B. Swanson, MD, 1810 Wealthy Street, SE, Grand Rapids 6
N. M. Taylor, MD, 215 Dean Lane, Grosse Pte. Park 36

Medical Aspects of Organized Athletics

J. S. Feurig, MD, Chairman, 321 Kensington Road, East Lansing
R. E. Anderson, MD, 2136 S. Seventh, Ann Arbor 48106
J. D. Cline, MD, 504 Linwood Drive, Midland
Gerald Drake, MD, 511 Waukazoo, Petoskey
R. H. Evans, MD, 111 S. Monroe St., Sturgis
E. M. Fugate, MD, 206 Westgate Medical Towers, Muskegon
J. O. Goodsell, MD, 1600 N. Michigan, Saginaw
G. A. O'Connor, MD, University of Michigan Medical Center, Ann Arbor
Kenneth VandenBerg, MD, 35 S. Johnson Avenue, Pontiac

Medicine and Religion

R. L. Rapport, MD, Chairman, 503 S. Saginaw St., Flint 3
M. J. Albers, MD, 1227 N. Michigan Avenue, Saginaw
F. A. Barbour, MD, 2015 Lincoln Drive, Flint 3
W. C. Beets, MD, 124 Fulton Street East, Grand Rapids 2
R. R. Cooper, MD, 1515 David Whitney Building, Detroit 48226
H. K. Filip, MD, 755 W. Michigan, Jackson
W. G. Fox, MD, 715 N. University, Ann Arbor
R. A. Frary, MD, 505 Strasburg Road, Route 1, Monroe
A. E. Heustis, MD, Michigan Dept. of Public Health, 3500 N. Logan, Lansing
W. J. Hornbeck, MD, 1200 Ransom Street, Muskegon
M. A. MacDonald, MD, 252 E. Lovell, Kalamazoo
C. E. Morrill, MD, 400 W. State Street, Hastings

Michigan Medical History

J. R. G. Gosling, MD, Chairman, 315 Corri Road, Ann Arbor
G. H. Agate, MD, Michigan Dept. of Publi Health, 3500 N. Logan, Lansing
Otto O. Beck, MD, 308 Wabeek Building, Birmingham
H. L. Miller, MD, 31815 Southfield Road, Birmingham
A. H. Whittaker, MD, 17000 E. Jefferson Avenue Grosse Pointe 30
Wm. M. LeFevre, MD, Advisor, 315 W. Clay Avenue, Muskegon
Wm. J. Stapleton, Jr., MD, Advisor, 201 E. Kirb Avenue, Detroit 2

Nursing

R. L. Tupper, MD, Chairman, 86 Ottawa Drive Pontiac
Shirley Austin, MD, 5224 St. Antoine Street, Detroit 2
Marjorie P. Meyers, MD, 5320 John R Street, Detroit 2
G. E. Moore, MD, 323 West Second, Flint 3
D. R. Mouw, MD, 2352 Jefferson Drive, SE, Gran Rapids 7
J. A. Witter, MD, 344 Glendale Avenue, Highlan Park 3
R. J. Mason, MD, Advisor, 618 N. Woodwar Avenue, Birmingham 48011

Rehabilitation

R. W. Pomeroy, MD, Chairman, 1322 E. Michigan, Lansing
G. T. Aitken, MD, 50 College Avenue, SE, Gran Rapids 3
R. H. Allen, MD, 191 College, Battle Creek
H. M. Andre, MD, 500 Cherry Street, SE, Gran Rapids 3
M. F. Bruton, MD, 341 Massachusetts, Detroit 21
L. L. Davis, MD, 314 S. Brown St., Mt. Pleasan
R. L. Fitts, MD, 50 College Avenue, SE, Gran Rapids 3
J. S. Guyton, MD, 2799 W. Grand Blvd., Detroit
C. M. Hanson, MD, 403 Bronson Medical Center Kalamazoo
A. C. McClay, MD, 217 So. Madison, Travers City
J. W. Rae, Jr., MD, 1313 E. Ann Street, An Arbor
J. N. Schaeffer, MD, 261 Brady, Detroit 1

M. Schwartz, MD, A. C. Spark Plug, Flint

D. Steiner, MD, 3044 W. Grand Blvd., Detroit

. M. Wilson, Jr., MD, Marquette Medical Center, Marquette 49855

Relative Value Study

. R. VanZwalenburg, MD, Chairman, 2116 Coronado Drive, SE, Grand Rapids 49506

. M. Bullington, MD, 2000 Court Street, Saginaw

D. Fryfogle, MD, CD 8 Medical Concourse, Northland Center, Southfield

R. L. Mainwaring, MD, 1910 Russell, Dearborn

S. B. Winslow, MD, 710 North Avenue, Battle Creek

A. J. Neerken, MD, Advisor, 404 Bronson Medical Center, Kalamazoo

Workmen's Compensation

William Jend, Jr., MD, 1365 Cass Avenue, Detroit 26

D. L. Block, MD, 3001 Miller Road, Dearborn

Mr. A. Stewart Kerr, 1600 Dime Building, Detroit

Special Appointments

Consultants to United Fund

. T. Aitken, MD, 50 College Avenue, SE, Grand Rapids

. S. Chambers, MD, 3402 Westwood Parkway, Flint 3

. J. Feeney, MD, 1908 Michigan National Tower, Lansing

. M. Heavenrich, MD, 1107 Gratiot Avenue, Saginaw

D. Littig, MD, 1324 S. Park Street, Kalamazoo

arjorie P. Meyers, MD, 5320 John R Street, Detroit 48202

. A. Towsley, MD, W5610 University Hospital, Ann Arbor

Michigan Cancer Coordinating Committee

epresenting Michigan State Medical Society

. W. Colwell, MD, 328 S. Saginaw Street, Flint 3

. M. Nalbandian, MD, William Beaumont Hospital, Royal Oak

Allen Payne, MD, 1840 Wealthy Street, SE, Grand Rapids

H. J. VandenBerg, Jr., MD, 1553 Woodward Avenue, Detroit 26

Representing Michigan Cancer Foundation

Mr. C. F. Arnold, 15915 Rosemont, Detroit 48223

William Bromme, MD, 318 Professional Building, Detroit 48201

Representing Michigan Dept. of Public Health

John A. Cowan, MD, Michigan Dept. of Public Health, 3500 N. Logan, Lansing

Representing Michigan State Dental Association

B. E. Luck, DDS, 1512 Michigan National Tower, Lansing

Representing Michigan Health Officers Association

O. D. Stryker, MD, 43525 Elizabeth Road, Mt. Clemens

Honorary Members

Mr. Donald E. Johnson, 211 E. Court, Flint

H. M. Nelson, MD, 1067 Fisher Building, Detroit 48202

Committees of the House of Delegates

he following committees are to be appointed by mes J. Lightbody, MD, Speaker of the House Delegates:

ERTIFICATES OF COMMENDATION

ONSTITUTION AND BYLAWS

ETERMINE MONETARY VALUE OF UNIT OF RELATIVE VALUE SCALE

EAPPORTIONMENT

SELECT MICHIGAN'S OUTSTANDING PHYSICIAN

STUDY FINANCIAL STRUCTURE OF MSMS

STUDY MULTI-COUNTY MEDICAL SOCIETIES

STUDY PROCEDURES OF HOUSE OF DELEGATES

ANY OTHER COMMITTEES DEEMED NECESSARY

Officers of MSMS County Medical Societies*

ALLEGAN

President—Harry Schneiter, M.D., 425 Cutler St., Allegan

President-Elect—Walter Chase, M.D., 137½ N. Main St., Plainwell

Secretary—Peter Brachman, Jr., M.D., 222 Trowbridge St., Allegan

ALPENA-ALCONA-PRESQUE ISLE

President—Thomas M. Watkins, M.D., 312 E. Chisholm, Alpena

President-Elect—George Stump, M.D., 123 N. 2nd Ave., Alpena

Secretary—Roy E. Newman, M.D., 315 W. Campbell, Alpena

BARRY

President—Everett Phelps, M.D., 535 E. Francis St., Hastings

President-Elect—

Secretary—Gordon M. Finnie, M.D., 535 E. Francis St., Hastings

BAY-ARENAC-IOSCO

President—Howard T. Knobloch, M.D., 1102 Columbus, Bay City

President-Elect—Frederick J. Chapin, M.D., 101 W. John, Bay City

Secretary—Harry F. Vail, M.D., 1107 Columbus, Bay City

BERRIEN

President—D. K. Hassan, M.D., 802 E. Front St., Buchanan

President-Elect—S. M. Mesirow, M.D., E. Empire Ave., Benton Harbor

Secretary—D. C. Camp, M.D., 3 N. St. Joseph St., Niles

BRANCH

President—John Heffelfinger, M.D., 292 E. Chicago St., Coldwater

President-Elect—John J. Rick, M.D., 61 E. Chicago St., Coldwater

Secretary—Ronald Hoeksema, M.D., 292 E. Chicago St., Coldwater

CALHOUN

President—Arnold Albright, M.D., 401 Security Bank Bldg., Battle Creek

President-Elect—F. L. Graubner, M.D., Bogar Theater Bldg., Marshall

Secretary—Francis Lam, M.D., 408 Capital Ave., S.W., Battle Creek

CASS

President—Aaron Warren, M.D., 109 School St., Cassopolis

President-Elect—

Secretary—H. V. Guzzo, M.D., 110 W. Division, Dowagiac

CHIPPEWA-MACKINAC

President—Dale T. Scott, M.D., 816 Ashmun St Sault Ste. Marie

President-Elect—Tony J. Trapasso, M.D., 816 Asl mun St., Sault Ste. Marie

Secretary—Earl S. Rhind, M.D., 300 Court St Sault Ste. Marie

CLINTON

President—James M. Grost, M.D., 210 E. Walke St. Johns

President-Elect—A. C. Henthorn, M.D., 105 S. O tawa, St. Johns

Secretary—B. C. Cook, M.D., Westphalia

DELTA-SCHOOLCRAFT

President—Nikolaus J. Theisen, M.D., 1400 16t Ave. S., Escanaba

President-Elect—Norman Lindquist, M.D., 205 10th St., Escanaba

Secretary—Ray L. Hockstad, M.D., 804 Ludingto St., Escanaba

DICKINSON-IRON

President—W. H. Huron, M.D., 106 West B St Iron Mountain

President-Elect—

Secretary—D. J. Jacobs, M.D., 105 East B St., Iro Mountain

EATON

President—O. Stewart Erhard, M.D., 301 Ranch St., Eaton Rapids

President-Elect—S. R. Robinson, M.D., 1140 Wi low St., Grand Ledge

Secretary—Keith L. Curtis, M.D., 431 Foote St Charlotte

GENESEE

President—John E. Wentworth, M.D., 420 S. Ba lenger Hwy., Flint

President-Elect—John C. Benson, M.D., 402 W Second St., Flint

Secretary—James F. Dooley, M.D., 3210 S. Do Hwy., Flint

GOGEBIC

President—P. J. Murphy, M.D., Seaman Bldg Ironwood

President-Elect—A. C. Gorrilla, M.D., 210 Gogebi Nat'l Bank Bldg., Ironwood

Secretary—Donald L. Davidson, M.D., 300 Cla berg St., Bessemer

GRAND TRAVERSE-LEELANAU-BENZIE

President—William T. Edmonds, M.D., Munson Hospital Medical Center, Traverse City

President-Elect—Warren W. Cline, M.D., 999 Sixt St., Traverse City

Secretary—Arthur F. Dundon, Sr., M.D., Box Traverse City

As of November 1, 1966

GRATIOT-ISABELLA-CLARE

resident—T. Haddad, M.D., 207 W. Franklin St., Mt. Pleasant
resident-Elect—A. Veldhuis, M.D., 314 S. Brown, Mt. Pleasant
ecretary—F. D. Johnson, M.D., 1101 S. Mission, Mt. Pleasant

HILLSDALE

resident—Arthur Stein, M.D., 144 Budlong St., Hillsdale
resident-Elect—Donald G. Trapp, M.D., Steamburg Rd., Hillsdale
ecretary—Edmund Henelt, M.D., 7 Markris Dr., Hillsdale

HOUGHTON-BARAGA-KEWEENAW

resident—K. E. Rowe, M.D., 107½ Calumet Ave., Calumet
resident-Elect—J. A. Stroube, M.D., L'Anse
ecretary—Honorato Barrios, M.D., 207 Huron Ave., Houghton

HURON

resident—James M. Mullaney, Jr., M.D., 108 S. Port Crescent St., Bad Axe
resident-Elect—David L. Jones, M.D., 206 N. Heisterman St., Bad Axe
ecretary—Robert A. Willits, M.D., 193 N. Main St., Elkton

INGHAM

resident—J. F. Harrold, M.D., 326 W. Ionia, Lansing
resident-Elect—Robert Stow, M.D., 2909 E. Grand River, Lansing
ecretary—Paul T. Niland, M.D., 1322 E. Michigan Ave., Lansing

IONIA-MONTCALM

resident—Robert Rice, M.D., P.O. Box 271, Greenville
resident-Elect—Joseph Kopchick, M.D., Muir
ecretary—R. J. O'Malley, M.D., 230½ W. Main, Ionia

JACKSON

resident—R. C. Deming, M.D., 724 W. Franklin, Jackson
resident-Elect—E. W. Adams, M.D., 720 W. Franklin, Jackson
ecretary—R. E. Medlar, M.D., 719 Seventeenth St., Jackson

KALAMAZOO

resident—William G. Birch, M.D., 402 Bronson Medical Center, Kalamazoo
resident-Elect—Frederick J. Margolis, M.D., 2901 S. Westnedge, Kalamazoo
ecretary—Norman A. Gremel, M.D., 458 W. South Street, Kalamazoo

KENT

resident—Dale L. Kessler, M.D., 1840 Wealthy St., S.E., Grand Rapids
resident-Elect—James A. Ferguson, M.D., 72 Sheldon Ave., S.E., Grand Rapids
Secretary—Carl H. Moberg, M.D., 833 Lake Drive, S.E., Grand Rapids

LAPEER

President—Cornell Greavu, M.D., North Branch
President-Elect—Clifford House, M.D., 14444 W. Genesee St., Lapeer
Secretary—Leon R. Boruch, M.D., Lapeer State Home, Lapeer

LENAWEE

President—James Feeney, M.D., Mill St., Adrian
President-Elect—R. E. Dustin, M.D., 102 W. Brown St., Tecumseh
Secretary—Richard D. Coak, M.D., 602 E. Pottawatamie, Tecumseh

LIVINGSTON

President—Thomas F. Higby, M.D., Fowlerville
President-Elect—R. W. Phillips, M.D., Hamburg
Secretary—Roscoe V. Stuber, M.D., 1200 Byron Rd., Howell

LUCE

President—William Purmort, M.D., Newberry State Hospital, Newberry
President-Elect—Greg Keizer, M.D., Newberry State Hospital, Newberry
Secretary—R. P. Hicks, M.D., 210 W. John, Newberry

MACOMB

President—Charles M. Ebner, M.D., 26401 Harper, St. Clair Shores
President-Elect—William E. Rush, M.D., 25815 Harper, St. Clair Shores
Secretary—Gerald W. Morris, M.D., 14 Belleview, Mt. Clemens

MANISTEE

President—David A. Wild, M.D., 84 Cypress St., Manistee
President-Elect—Marlowe L. Schwarz, M.D., Onekama
Secretary—Robert R. Garneau, M.D., Forest Clinic Bldg., Manistee

MARQUETTE-ALGER

President—James F. Tobin, M.D., 724 Elliott Ave., Ishpeming
President-Elect—Donal T. Conley, M.D., 1414 W. Fair Ave., Marquette
Secretary—R. Leonard Carefoot, M.D., 1414 W. Fair Ave., Marquette

MASON

President—H. Bacon, M.D., 202 N. Thomas, Scottville
President-Elect—
Secretary—A. F. Boon, M.D., 203 N. Ferry St., Ludington

MECOSTA-OSCEOLA-LAKE

President—Gordon C. Pratt, M.D., Ferris Health Service, Big Rapids

County Society Officers/Continued

President-Elect—Leland A. Hickox, M.D., Ferris Health Service, Big Rapids
Secretary—James E. Walters, M.D., 1014 S. State St., Big Rapids

MEDICAL SOCIETY OF NORTH CENTRAL COUNTIES

President—George Kieler, M.D., Roscommon
President-Elect—Thomas Howarth, M.D., Gladwin
Secretary—Ophelia Baker, M.D., 199 Fairview, West Branch

MENOMINEE

President—Karm C. Kerwell, M.D., P.O. Box 17, Stephenson
President-Elect—Nils Agneberg, M.D., 531 1st St., Menominee
Secretary—Herman R. Brukerdt, M.D., 534 First St., Menominee

MIDLAND

President—Edward H. Meisel, M.D., Masonic Bldg., Midland
President-Elect—R. M. Goethe, M.D., 110 W. Sugnet, Midland
Secretary—Charles G. Kramer, M.D., The Dow Chemical Co., Medical Dept., Midland

MONROE

President—W. S. Middleton, M.D., 219 W. Front St., Monroe
President-Elect—Z. B. Cigany, M.D., 1402 Monroe St., Carleton
Secretary—R. A. Frary, M.D., 505 Strasburg Rd., R-1, Monroe

MUSKEGON

President—William J. Hanley, M.D., 201 Medical Arts Center, Muskegon
President-Elect—Warren G. White, M.D., 307 Westgate Medical Tower, Muskegon
Secretary—Leland E. Holly, II, M.D., 889 2nd St., Muskegon

NEWAYGO

President—Johann C. Decker, M.D., 52 Maple, S.E., Grant
President-Elect—Booker L. Masters, M.D., 111 W. Dayton, Fremont
Secretary—R. W. Emerick, M.D., Box 147, Fremont

NORTHERN MICHIGAN

President—Dean Elliott, M.D., Burns Clinic, Petoskey
President-Elect—Richard Knecht, M.D., 403 E. Lake, Petoskey
Secretary—Peter J. Connaughton, M.D., Burns Clinic, Petoskey

OAKLAND

President—Worth W. Henderson, M.D., 1307 S. Washington, Royal Oak
President-Elect—Kenneth VandenBerg, M.D., 35 S. Johnson, Pontiac
Secretary—Frederick W. Bryant, M.D., 201 Washington Square Plaza, Royal Oak

OCEANA

President—Linford J. Davis, M.D., 22 N. State St. Hart
President-Elect—
Secretary—

ONTONAGON

President—Carl Robert Lahti, M.D., 101 Secon St., Ontonagon
President-Elect—Donald H. Archibald, M.D., 10 Second St., Ontonagon
Secretary—W. F. Strong, M.D., 701 River St., Ontonagon

OTTAWA

President—Vernon Boersma, M.D., 121 W. 24th St. Holland
President-Elect—Frank Groat, M.D., 631 Frankli St., Grand Haven
Secretary—Robert Albers, M.D., 601 Michiga Ave., Holland

SAGINAW

President—V. E. Cortopassi, M.D., 324 S. Washington, Saginaw
President-Elect—R. J. Gerard, M.D., 2419 Mackinaw, Saginaw
Secretary—J. T. Keyes, M.D., 10222 Maple Road Birch Run

ST. CLAIR

President—Robert E. Rowe, M.D., 108 McMorra Blvd., Port Huron
President-Elect—Nicholas A. Douvas, M.D., 331 Pine St., Port Huron
Secretary—Erwin W. Blatter, M.D., 3864 Gratio Ave., Port Huron

ST. JOSEPH

President—Robert Evans, M.D., 111 S. Monroe Sturgis
President-Elect—D. R. Schimnoski, M.D., 117 Spring, Three Rivers
Secretary—Paul Brothers, M.D., 104 S. Lakeview Sturgis

SANILAC

President—Weldon Gift, M.D., Marlette
President-Elect—Duane Smith, M.D., Brown Cit
Secretary—Michael H. Jayson, M.D., 2764 Lorraine St., Marlette

SHIAWASSEE

President—Henry Forsyth, M.D., 137 S. Saginaw Chesaning
President-Elect—Phillip J. Moore, M.D., 221 E North St., Owosso
Secretary—Robert Harroun, M.D., 224 N. Ball Owosso

TUSCOLA

President—Edward Miles, M.D., Caro

resident-Elect—Maurice Chapin, M.D., Millington
ecretary—Maurice Chapin, M.D., Millington

VAN BUREN

resident—Arthur E. Parks, M.D., Lawton
resident-Elect—G. Lee Staff, M.D., Box 307, Hartford
ecretary—James M. Davis, M.D., 424 Huron, South Haven

WASHTENAW

resident—John M. Sheldon, M.D., University Medical Center, Ann Arbor
resident-Elect—Lyle D. Elliott, M.D., 27 S. Prospect, Ypsilanti
ecretary—Robert S. Ideson, II, M.D., 122 N. Thayer

WAYNE

resident—Brock E. Brush, M.D., 1010 Antietam, Detroit
resident-Elect—Frank B. Bicknell, M.D., 938 David Whitney Bldg., Detroit
ecretary—James Danforth, Jr., M.D., 1010 Antietam, Detroit

WEXFORD-MISSAUKEE

resident—Robert F. Barnett, M.D., Mercy Hospital, Cadillac
resident-Elect—
ecretary—Dennis E. Van Alst, M.D., Medical Arts Group, Cadillac

SAMMOND PLEASANT LODGE

Offers to the elderly and chronically ill

Peace and quiet. Freedom of a large and richly furnished home and acres of lawns and wooded rolling grounds, scientifically prepared tasty meals, congenial companionship. A real

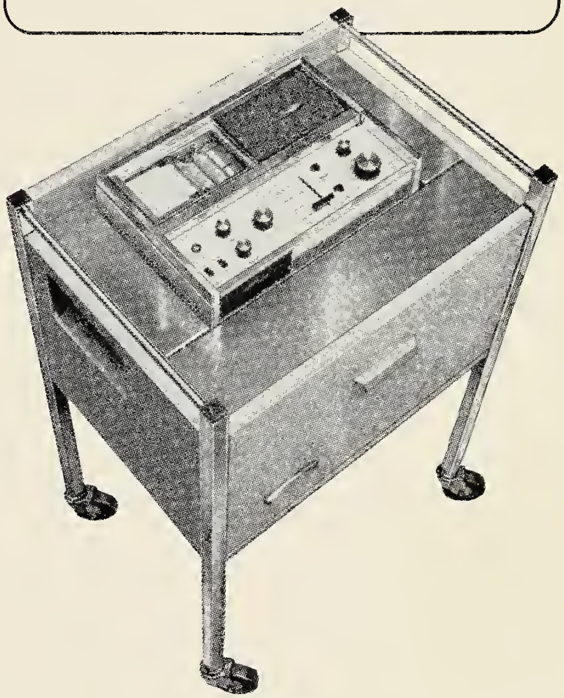
"Home away from Home"

Member of Michigan and American Nursing Home Associations. Highly recommended by members of the Medical Profession who have had patients at the Lodge.

For further information write to:

SAMMOND PLEASANT LODGE
124 West Gates Street
Romeo, Michigan
Plateau 2-2591

The dramatically new
Burdick EK 4
Electrocardiograph



What is a new ECG?

Take a look at the Burdick EK 4! Many important improvements have been made in electrocardiographs in recent years — this is why we invite your closer inspection of the EK 4. Reliability, diagnostic accuracy, and freshness of design are apparent in every detail. Precise recordings of high fidelity • Designed for use with auxiliary equipment, phone transmission, permanent recording of monitoring phenomena • Fast switching from lead to lead • 25-50 mm. speeds • ½ x 1 x 2 standardization on all leads • High frequency response permits use with PC-100 Heart Sound Preamp • Stable • Lightweight. If your present ECG can't offer you these up-to-date features, take a closer look at the EK 4. The EK 4 is a sound investment for your practice or department, and it's backed by Burdick dealer service. Write us. The Burdick Corporation, Milton, Wisconsin 53563.

THE G. A. INGRAM COMPANY
4444 Woodward Avenue, Detroit, Michigan 48201
Telephone: TEmple 2-4444

County Society Bulletin Editors*

BAY COUNTY MEDICAL SOCIETY BULLETIN—W. G. Gamble, Jr., M.D., 2010 5th Ave., Bay City, 48708

BERRIEN COUNTY MEDICAL SOCIETY BULLETIN—Henry J. Klos, M.D., 3702 Sandra Terrace, St. Joseph, 49085

CALHOUN COUNTY MEDICAL SOCIETY JOURNAL—Carl E. Powell, M.D., 632 North Ave., Battle Creek, 49017

BULLETIN—DICKINSON-IRON COUNTY MEDICAL SOCIETY—Robert Anderson, M.D., Main St., Norway, 49870

BULLETIN—GENESEE COUNTY MEDICAL SOCIETY—Donald R. Bryant, M.D., 806 W. Sixth Ave., Flint, 48503

INGHAM COUNTY MEDICAL SOCIETY—"MEDICINA"—J. L. Isbister, M.D., 720 Seymour, Lansing, 48906

BULLETIN—KALAMAZOO ACADEMY OF MEDICINE—William C. Stewart, M.D., 433 S. Rose, Kalamazoo, 49006

KENT COUNTY MEDICAL BULLETIN—A. Thomas Hudson, M.D., 2060 Alpine, N.W., Grand Rapids, 49502

LENAWEE COUNTY MEDICAL SOCIET BULLETIN—Richard D. Coak, M.D., 602 Pottawatamie, Tecumseh, 49286

BULLETIN—MACOMB COUNTY MEDICAL SOCIETY—Gerald W. Morris, M.D., 14 Belleview, Mt. Clemens

MUSKEGON COUNTY MEDICAL SOCIET BULLETIN—Robert M. Jesson, M.D., 171 Peck St., Muskegon, 49441

OAKLAND COUNTY MEDICAL SOCIETY BULLETIN—Frederick W. Bryant, M.D., 346 Park Ave., Birmingham, 48009

BULLETIN—SAGINAW COUNTY MEDICAL SOCIETY—J. O. Goodsell, M.D., 107 Hayden St., Saginaw, 48607

BULLETIN—WASHTENAW COUNTY MEDICAL SOCIETY—Dean P. Carron, M.D., 706 W Huron St., Ann Arbor, 48103

DETROIT MEDICAL NEWS—WAYNE COUNTY MEDICAL SOCIETY—Edward J. Tallant M.D., 1010 Antietam Road, Detroit, 48207

County Medical Society Executive Secretaries*

BERRIEN COUNTY MEDICAL SOCIETY—Mrs. Mary Ann Raschke, 3702 Sandra Terrace, St. Joseph, 49085, phone (616) 429-4124

GENESEE COUNTY MEDICAL SOCIETY—Mrs. Ruth S. Garnsey, 806 W. 6th Ave., Flint, 48503, phone (313) 238-3781

INGHAM COUNTY MEDICAL SOCIETY—Mr. J. B. Kantner, 720 Seymour St., Lansing, 48906, phone (517) 489-1274

KALAMAZOO ACADEMY OF MEDICINE—Miss Mary A. Agar, 433 S. Rose St., Kalamazoo, 49006, phone (616) 342-8502

KENT COUNTY MEDICAL SOCIETY—Mr. Wm. G. McClimans, 190 Monroe Ave., N.W., Grand Rapids, 49502, phone (616) 458-4157

MACOMB COUNTY MEDICAL SOCIETY—Mrs Rosemary Terrien, 29944 E. Jefferson, St. Clai Shores, 48080, phone (313) 294-0890

MUSKEGON COUNTY MEDICAL SOCIETY—Mr. Donald Fairfield, Box 445, Muskegon, 49443 phone (616) 766-3511

OAKLAND COUNTY MEDICAL SOCIETY—Mrs. Mary G. Haines, 346 Park St., Birmingham, 48009, phone (313) 646-5400

SAGINAW COUNTY MEDICAL SOCIETY—Mr Carl G. King, 107 Hayden St., Saginaw, 48607 phone (517) 753-8722

WASHTENAW COUNTY MEDICAL SOCIETY—Mrs. Flora Mayer, 706 W. Huron, Ann Arbor 48103, phone (313) 668-6241

WAYNE COUNTY MEDICAL SOCIETY—Mis Else Kolhede, 1010 Antietam, Detroit, 48207 phone (313) 963-1640

---

*As of November 1, 1966

Woman's Auxiliary to MSMS

Officers

resident
Mrs. Henry Scovill—1313 W. Cross, Ypsilanti

resident-Elect
Mrs. W. G. Gamble—1303 Fifth Ave., Bay City

irst Vice-President
Mrs. Earl E. Weston—5655 Forman Dr., Wing Lake, Birmingham

econd Vice-President
Mrs. George Anthony—912 Beard St., Flint

ecretaries
Recording
Mrs. Edwin Galsterer—417 Brockway Pl., Saginaw
Corresponding
Mrs. Howard R. Williams—609 Stratford Dr., Ann Arbor
Financial
Mrs. Russell DeJong—1526 Harding Rd., Ann Arbor

reasurer
Mrs. Otto Engelke—810 Hutchins Ave., Ann Arbor

irectors
District I
Mrs. Robert Hart—60 N. Howard St., Croswell
District II
Mrs. C. J. Stringer—425 Walbridge Dr., East Lansing
District III
Mrs. R. K. Currier—1223 Kilgore Rd., Kalamazoo
District IV
Mrs. Robert E. Bloom—919 Lake Ave., North Muskegon
District V
Mrs. Ralph Dawson—1617 Linwood Ave., Flint
District VI
(not organized)
District VII
Mrs. Philip Wiley—326 West Seventh St., Traverse City
District VIII
Mrs. Maurice D. Meier—1033 Mine St., Calumet
District IX
Mrs. Donald Finlayson—903 Prospect St., Sault Ste. Marie

Members-at-Large Coordinator
Mrs. Roy Matthews, Jr.—902 Foote St., Charlotte

Past President
Mrs. Rufus Reitzel, 1 Breitmeyer Place, Mt. Clemens

State Chairmen

arliamentarian
Mrs. Clarence Crook
1050 Wall Street, Apt. 10A
Ann Arbor

istorian
Mrs. Reuben Seime
835 Plymouth Rd.
Grand Rapids

MA-ERF
Mrs. Warren S. Wille
5325 Browns Lake Road
Jackson

rchives
Mrs. Reuben Seime
835 Plymouth Road
Grand Rapids

Auxilum Editor
Mrs. F. Mansel Dunn
507 Woodlawn Pass
East Lansing

Community Service
Mrs. Earl E. Weston
5655 Forman Dr., Wing Lake
Birmingham

Convention
Mrs. Willis Dixon
2012 Coronado Dr. S.E.
Grand Rapids
Mrs. Francis P. Rhoades
272 Ashland
Detroit

Disaster Preparedness and Safety
Mrs. George Anthony
912 Beard Street
Flint

Finance
Mrs. Edward S. Maxim
34140 Jefferson Avenue
St. Clair Shores

Health Careers
Mrs. Edward Lake
876 Bloomfield
Jackson

Auxiliary Chairmen/Continued

International Health

Mrs. Charles Schoff
5209 Sunset
Midland

Legislation

Mrs. Donald Bolstad
225 S. Silvery Lane
Dearborn

MD-PAC

Mrs. Norbert Pasternacke
7730 E. Jefferson
Detroit

Mental Health

Mrs. Johannes D. Plekker
1438 Lenox S. E.
Grand Rapids

Nominations

Mrs. Rufus H. Reitzel
1 Breitmeyer Place
Mt. Clemens

Organization and Membership

Mrs. W. G. Gamble, Jr.
1303 Fifth Avenue
Bay City

Press

Mrs. William R. Rekshan
47558 North Shore Drive
Belleville

Program

Mrs. George Anthony
912 Beard
Flint

RD-TB Speaking Project

Mrs. Fred M. Maynard
9366 Manor Blvd.
Allen Park

Revisions

Mrs. John Ganshow
10025 Nadine
Huntington Woods

Rural Health

Mrs. Donald Jacobs
1609 Parkview Drive
Iron Mountain

WA SAMA

Mrs. F. Ross Birkhill
31 Shady Hollow
Dearborn

BRIGHTON HOSPITAL

A non-profit foundation

FOR ALCOHOLISM

Member, Michigan Hospital Association

A facility designed to rehabilitate and aid the compulsive drinker in arresting his addiction.

Brighton Hospital meets the standards established by the Michigan State Board of Alcoholism and is recommended by that Board.

12851 East Grand River
One block south of I-96 at Kensington Rd. Exit
four miles east of U. S. 23
Brighton, Michigan
ACademy 7-1211

County Auxiliary Presidents

Allegan—Mrs. Van Keeler—1913 104th Ave., Otsego

Bay-Arenac-Iosco—Mrs. Martin Jaffe—102 Boehringer, Bay City
Berrien—Mrs. John McLelland—620 Lynwood Dr., Benton Harbor
Branch—Mrs. John Rick—131 N. Hanchett, Coldwater

Calhoun—Mrs. Richard Bakken—91 Sherman, Battle Creek
Chippewa-Mackinac—Mrs. Earl Rhind—Riverside Dr., Box 40, Sault Ste. Marie

Delta-Schoolcraft—Mrs. Raymond Hochstad—1616 S. 15th St., Escanaba
Dickinson-Iron—Mrs. D. J. Jacobs—1609 Parkview Dr., Iron Mountain

Eaton—Mrs. Herman Van Ark—410 Blake St., Eaton Rapids

Genesee—Mrs. John Schwartz—5313 Briar Crest Dr., Flint
Gogebic-Ontonagon—Mrs. P. J. Murphy—215 W. Ridge St., Ironwood
Grand Traverse-Leelanau-Benzie—Mrs. Donald Pike—220 7th St., Traverse City

Houghton-Keweenaw-Baraga—Mrs. Ivan Lecore—5115 Sheridan Rd., Houghton
Huron—Mrs. David Jones—866 Jane St., Bad Axe

Ingham—Mrs. Henry Malcolm—1461 Old Mill Rd., East Lansing
Ionia-Montcalm—Mrs. Joseph Kopchick—Box 201, Muir

Jackson—Mrs. D. M. Allen—310 E. State, Hanover

Kalamazoo—Mrs. Roger Scholten—930 W. Inkster Ave., Kalamazoo
Kent—Mrs. James Klomparens—1662 Morningside S.E., Grand Rapids

Lapeer—Mrs. Clifford House—1750 Gray Rd., Lapeer
Lenawee—Mrs. Richard Gaserigne—1046 Orchard Rd., Adrian
Livingston—Mrs. E. S. Woodworth—433 Caledonia, Howell

Macomb—Mrs. William Sims—51 Breitmeyer Pl., Mt. Clemens
Marquette-Alger—Mrs. Thomas Mudge—550 County Rd., Marquette
Mason—Mrs. Charles Paukstis—502 N. Lakeshore Dr., Ludington
Mecosta-Osceola-Lake—Mrs. James Walters, 624 S. Michigan, Big Rapids
Menominee—Mrs. Robert Olsen—1713 22nd Ave., Menominee
Midland—Mrs. Charles Schoff—5209 Sunset, Midland
Monroe—Mrs. Robert Streicher—222 Maywood, Monroe
Muskegon—Mrs. Robert Clowater—709 Lake Dr., N. Muskegon

Newaygo—Mrs. Robert Paxton—3918 Skyline Dr., Fremont

Oakland—Mrs. P. T. Lahti—2200 Tottenham Rd., Birmingham
Ottawa—Mrs. Bernard Veenstra—116 South 4th, Grand Haven

Saginaw—Mrs. John Goodsell—132 Graham St., Saginaw
Sanilac—Mrs. Gerald Groat—3345 S. Main, Deckerville
Shiawassee—Mrs. Walter Merz—1409 N. Waters, Owosso
St. Clair—Mrs. William Dinnen—3185 Waldheim Dr., Port Huron
St. Joseph—Mrs. H. R. Weisheit—131 S. Lakeview Ave., Sturgis

Tuscola—Mrs. H. L. Nigg—308 S. State St., Caro

Washtenaw—Mrs. Dean Carron—1330 Glendaloch, Ann Arbor
Wayne—Mrs. Harvey Lynn—18285 Birchcrest, Detroit
Wayne, Southern—Mrs. Thomas Hoffer, 1556 Walnut, Dearborn
Wexford-Missaukee-Manistee—Mrs. Dennis VanAlst—436 E. Chapin, Cadillac

American Medical Association

535 North Dearborn Street
Chicago, Illinois 60610
(312) 527-1500
(TWX-910-221-0300)
(ANS BK-AMA CGO)

1 Farragut Square, South
Washington, D.C. 20006
(202) 783-8155
(TWX-710-822-9409)
(ANS BK-AMA DC)

AMA Officers

President: Charles L. Hudson, M.D., Cleveland Clinic, 2020 E. 93rd St., Cleveland, Ohio 44106, phone (216) 231-6800, ext. 2245

President-Elect: Milford O. Rouse, M.D., Med. Arts Bldg., 1719 Pacific Ave., Dallas, Texas 75201

Immediate Past President: James Z. Appel, M.D., 305 N. Duke St., Lancaster, Pa. 17602

Vice President: E. S. Jones, M.D., 50 Kenwood St., Hammond, Indiana 46324

Secretary-Treasurer: Gerald D. Dorman, M.D., 51 Madison Ave., New York, N. Y. 10010

Speaker, House of Delegates: Walter C. Bornemeier, M.D., 4665 W. Peterson Ave., Chicago, Ill. 60646

Vice Speaker: Russell B. Roth, M.D., 225 W. 25th St., Suite 204, Erie, Pa. 16502

Chairman, Board of Trustees: Wesley W. Hall, M.D., 607 N. Arlington Ave., Reno, Nev. 8950

Vice Chairman: Homer L. Pearson, M.D., 901 N.W. 17th St., Miami, Fla. 33136

AMA Staff Executives

Executive Vice President: F. J. L. Blasingame, M.D.

Assistant Executive Vice President: Ernest B. Howard, M.D.

Assistant to Executive Vice President: Leo E. Brown

Director, Division of Scientific Activities: H. H. Hussey, M.D.

Director, Division of Socio-Economic Activities: C. C. Edwards, M.D.

Director, Division of Scientific Publications: J. H Talbott, M.D.

Director, Communications Division: J. M. Reed

Director, Field Service Division: A. D. Gates

Manager, Washington Office: R. T. Lester, M.D

Director, Management Services Division: R. H Clark

Director, Law Division: Bernard D. Hirsh, LL.B

Woman's Auxiliary to AMA

President: Mrs. Asher Yaguda, 61 Lincoln Park, Newark, N. J.

PLAINWELL SANITARIUM, INC.

Plainwell, Michigan — MU 5-8441

Edwin M. Williamson, M.D.
M. Leroy Borry, M.D.

Dan W. Everett, M.D.
Wilbur R. King, Ph.D.

The Plainwell Sanitarium is a private psychiatric hospital licensed by the Michigan Department of Mental Health, and member of the American Hospital Association, Michigan Hospital Association, and National Association of Private Psychiatric Hospitals. Our extensive diagnostic treatment services include the following:

- Organic and psychological therapy for the psychiatrically and emotionally disturbed of all ages.
- Diagnostic evaluation of neurological disorders.
- Rehabilitative services for geriatric and convalescent patients.
- Medico-Legal counsel.
- Diagnostic and psychological evaluation and hospitalization, if indicated, of juveniles for Probate and Juvenile Courts.

Directory, Listed by Component Medical Societies

Special Memberships are indicated as follows: "L" for Life Members; "M" for Military Members; "N" for Non-Resident Members; "R" for Retired Members; "A" for Associate Members; all others are Active Members (Numbers in parentheses indicate County Society Code Numbers used in Alphabetical Roster.)

ALLEGAN COUNTY MEDICAL SOCIETY (10)

Brachman, A. Peter, Jr.......222 Trowbridge St., Allegan
Brown, Lewis F............133 E. Allegan St., Otsego
Chase, Walter E...........137½ N. Main St., Plainwell
Clark, James I.......................Box B, Fennville
Everett, D. W...........Plainwell Sanitarium, Plainwell
Goddard, G. B................218 E. Orleans, Otsego
Goude, Albert G. (A)
Hays, James D..............................Douglas
ohnson, Elwin B..............144 Brady St., Allegan
ohnson, Harrison H. (L)...................Wayland
Keeler, Van O....................304 Dix St., Otsego
Krawczyck, B.....................Box 806, Jackson
Mahan, James E...........402 Trowbridge St., Allegan
Medill, Wilbur C.............139 N. Main St., Plainwell
Miller, Kenneth C.........................Saugatuck
Pone, Janis..................................Martin
Ramseyer, Gladwin E...........125 E. Bridge, Plainwell
Schneiter, Harry E..............425 Cutler St., Allegan
Schock, Wm. H...............315 Maple St., Saugatuck
Smith, R. C., Jr.............................Allegan
Southern, Edward ....Allegan
Topp, E. Robert..................50 Allegan, Plainwell
Topp, Elwin W..............353 Naomi St., Plainwell
Van Der Kolk, Bert.........................Hopkins
Vander Voord, Gerald........312 E. Plum St., Wayland
Vaughan, Willard R. (L) ....Plainwell
Veenschoten, Girard......6600 W. Grand River, Brighton
Wiseman, Bertha A...................Box 177, Allegan

ALPENA-ALCONA-PRESQUE ISLE COUNTY MEDICAL SOCIETY (14)

Aliferis, Peter............Alpena General Hosp., Alpena
Arscott, Edward F.........................Rogers City
Brown, Donald C..............312 E. Chisholm, Alpena
Bunting, John W..............110 N. 1st Ave., Alpena
Burkholder, H. J. (L)......122 N. Second Ave., Alpena
Cohn, Stuart L............1253 W. Washington, Alpena
Constantine, Aeneas.......................Harrisville
Finch, Donald E...........................Onaway
Foley, Richard...........................Rogers City
Fox, William L...........601 W. Chisholm St., Alpena
Grause, Thomas J.............312 E. Chisholm, Alpena
Greenwood, James..............115 N. First St., Alpena
Hier, Edward A..........125 N. Second Ave., Alpena
ackson, Wm. F...........................Rogers City
Kessler, Harold......Box A, Ypsilanti St. Hsp., Ypsilanti
Kutsche, W. F....................208 Lake St., Oscoda
Leopard, J. M................312 E. Chisholm, Alpena
Lipski, John G. (A)..Traverse State Hosp., Traverse City
Nesbitt, Wm. E...............123 N. 2nd Ave., Alpena
Newman, Roy E.........Alpena General Hosp., Alpena
O'Dell, F. C., Jr...........110 W. Chisholm St., Alpena
Parmenter, Elbert S. (L).............Box 192, Alpena
Philippon, Carlos A.........312 E. Chisholm St., Alpena
Ramsey, J. A.................312 E. Chisholm, Alpena
Ries, Robt. C............................Rogers City
Riker, John L............303 N. Seeond Ave., Alpena
Rowell, Wilfred J.......................Eagle Harbor
Spens, James E.............123 N. Second Ave., Alpena
Stump, G. D......................123 N. Second, Alpena
Wagoner, Darwin E.....5007 N. Cedar Lake Rd., Oscoda
Watkins, T. M...............312 E. Chisholm St., Alpena
Wienczewski, T. W.............919 N. 2nd St., Alpena
Wilson, Chas. S. (L)............730 State Ave., Alpena

BARRY COUNTY MEDICAL SOCIETY (18)

Birk, Wilbur R.................110 W. Center, Hastings
Blair, Larry...................110 W. Center, Hastings
Brown, Jack A...............303 Broadway, Middleville
Castleman, Douglas H.........110 W. Center, Hastings
Finnie, Gordon M.............535 E. Francis, Hastings
Finnie, Raymond G............535 E. Francis, Hastings
Gwinn, Alexander B..........1016 San Lucia Dr. SE, Grand Rapids
Heaslip, Jos. D. (R)..13800 83rd Place N., Largo, Florida
Hoffs, Marinus A..........911 Fourth St., Lake Odessa
Huebner, R. J.................110 W. Center, Hastings
Lofdahl, Stewart (R)......R 1 Box 172, St. Charles, Ill.
Logan, Wesley G.............City Bank Bldg., Hastings
Lundeen, John G.........595 Jordan Lake, Lake Odessa
Morrill, Charles E...........400 W. State St., Hastings
Myers, Thos. W.............307 N. Main St., Nashville
Noah, Melvin L..........................Middleville
Phelps, Everett L...........535 E. Francis St., Hastings
Pryor, Robt. B...............400 W. State St., Hastings
Tromp, Jack L..................R. D. 3, Lake Odessa

BAY-ARENAC-IOSCO COUNTY MEDICAL SOCIETY (22)

Alcorn, Kent A.............1420 Center Ave., Bay City
Alcorn, Marshall W.........1420 Center Ave., Bay City
Allen, Arthur D. (L)........101 W. John St., Bay City
Antle, Robert C.............101 W. John St., Bay City
Asbury, Richard B.............2110 16th St., Bay City
Asline, John N...........207 N. Walnut St., Bay City
Austin, Justus J. (R)......................Tawas City
Bowman, David A...........101 W. John St., Bay City
Bozdech, Jiri Josef............900 N. Jackson, Bay City
Brenner, Frederick..............404 Main St., Essexville
Brinkman, Harvey H.......116 W. State St., East Tawas
Brown, Geo. M. (L)........207 N. Walnut St., Bay City
Campbell, Donald A.............700 Borton, Essexville
Campbell, John S.........1838 McKinley Ave., Bay City
Chapin, Fredk J.......366 Killarney Beach Rd., Bay City
Cook, Hugh K..............101 W. John St., Bay City
Cook, Raymond R...........1115 Fifth Street, Bay City
Cooper, James C...............410 Hart St., Essexville
Cosens, Stanley A.............101 W. John St., Bay City
Crissey, Robt. R.............101 W. John St., Bay City
Criswell, Robt. H. (L)....721 Washington Ave, Bay City
Csonka, Nicholas ....1308 Columbus Ave., Bay City
Dardas, Michael J...........1413 Center Ave., Bay City
Davis, James H...............1308 Columbus, Bay City
Dolbee, Malcolm K...................Box 518, Standish
Ferguson, Robert............101 W. John St., Bay City
Fischer, Hans....................................Standish
Follis, Wm. M..................101 W. John, Bay City
Gamble, Wm. G., Jr...........2010 5th Ave., Bay City
Gehman, J. R.....................................Standish
Geneczko, John T.........1102 Columbus Ave., Bay City
Grigg, John W..............2110 Sixteenth St., Bay City
Hafford, Robert C............101 W. John St., Bay City
Hagelshaw, Gayland L.......101 W. John St., Bay City
Hess, Chas. L. (R)........305 Leonard Lane, Midland
Heuser, Harold H.......916 Washington Ave., Bay City
Horowitz, Saml. F...........1415 Center Ave., Bay City
Huckins, Rodger S.............1802 Broadway, Bay City
Jacques, J. E..............................Tawas City
Jaffe, Martin D.............2110 16th Street, Bay City
Johnson, Orlen J. (L)......207 N. Walnut St., Bay City
Jones, M. Culver..............900 N. Jackson, Bay City
Jones, Tyre K., III............1639 Carla Ct., Essexville
Kelly, Larry Stanley.........................Tawas City
Kessler, Sabina Frux..........311 Center Ave., Bay City
Knobloch, Howard T..........1102 Columbus, Bay City
Kovacsi, Laszlo..............820 N. Johnson, Bay City
Kulinski, Eugene J..............2110 16th St., Bay City
Lambert, Leslie A.................... R. 2, East Tawas
Langin, John L...................100 15th St., Bay City
Loree, Joseph...............1407 Center Ave., Bay City
MacRae, Leonard D.........813 Sherman St., Bay City
Mayne, John C...............101 W. John St., Bay City
McGee, Harry B.................101 W. John, Bay City
McGee, Peter L................2110 16th St., Bay City
McSherry, Leo B., Jr.....1102 Columbus Ave., Bay City
Medvezky, Michael J.....1106 S. Madison Ave., Bay City
Miller, Edwin C.............101 W. John St., Bay City
Moeller, Arlyn..............700 Borton Ave., Essexville
Moore, Allen B.............700 Borton Ave., Essexville
Moore, Neal R................704 N. Jackson, Bay City
Mosier, Dwight J.............101 W. John St., Bay City
Nixon, Robert S..............101 W. John St., Bay City
Parks, Floyd R., Jr...........101 W. John St., Bay City
Payea, Norman P..........217 Newman St., East Tawas
Pearson, Stanley M...........101 W. John St., Bay City
Pelczar, Walter E...........321 N. Johnson St., Bay City
Prophater, Robt. C.........202 Boehringer Ct., Bay City
Reidinger, Alan A. (M)..109 Utah St., Dyess AFB, Texas
Rodda, E. H....................101 John St., Bay City
Rogers, Charles S............101 W. John St., Bay City
Rowe, Paul W................Mercy Hospital, Bay City
Salman, Feyyaz............1221 Orchard Rd., Essexville
Schmelzer, Wm. J...602 Mercer St., PO 746, Pinnconning
Shafer, Harold C.............101 W. John St., Bay City
Shields, Hubert L.............101 W. John St., Bay City
Staley, Hugh O......................................Omer
Standiford, David...............2110 16th St., Bay City
Stroia, Livius N..............101 W. John St., Bay City
Sutton, R. L., Jr...........116 W. State St., East Tawas
Sweet, Irwin ....Gladwin
Taheri, Zia E. ....1411 Center Avenue, Bay City
Tarter, Clyde S. (R)...............Star Route, Alpena
Tompkins, Dana A........................Pinconning
Treadway, Gaylord.............900 N. Jackson, Bay City
Vail, Harry F.............1107 Columbus Ave., Bay City
Vanasupa, P.................101 W. John St., Bay City
Way, John H.............903 N. Powell Rd., Essexville
Wilson, Thos G. (R)......R. 2, Box 112H, Tawas City
Woodburne, Harris L.........1420 Center St., Bay City
Wright, Thomas B.............101 W. John St., Bay City
Zaremba, Aloysius J. (L)..108 S. Madison Ave., Bay City
Ziliak, Alois L., Jr.............3393 Kiesel Rd., Bay City

BERRIEN COUNTY MEDICAL SOCIETY (26)

Asselin, Dean R.............2817 S. State St., St. Joseph
Atkinson, Robert L.......1626 Langley Ave., St. Joseph
Bailey, John H.........2150 Samuel Ave., Benton Harbor
Beal, Gerald N.......Sheperd Benning Bldg., St. Joesph
Benner, Wm. H.........700 Empire Rd., Benton Harbor
Bieri, Dixon L.........645 Riverview Dr., Benton Harbor
Bliesmer, August F...........505 Pleasant St., St. Joseph
Boyle, Robert E..............P.O. Drawer B, Stevensville
Brink, John W.................811 Myrtle St., St. Joseph
Bronfenbrenner, Jack..687 E. Empire Ave., Benton Harbor
Bruni, John R..................1 South Fifth St., Niles
Cadieux, Hale W.....645 Riverview Dr., Benton Harbor
Camp, Donald C.............8 N. St. Joseph Ave., Niles
Carter, John H...687 E. Empire Avenue, Benton Harbor
Cawthorne, Harold J. (R)........R. 4, Box 201, Coloma
Chickering, Wm. A...205 E. Delaware St., Benton Harbor
Cilella, S. G.....................Pawating Hospital, Niles
Colligan, Joseph (A)......University Hospital, Ann Arbor
Conway, Jos.......................................Watervliet
Conybeare, Robt. C........756 Pipestone, Benton Harbor
Cooke, Weldon....Berrien County Hosp., Berrien Center
Cooper, Wm. L.........Rt. 1, Paw Paw Island, Coloma
Crowell, Richard C.....645 Riverview Dr., Benton Harbor
Dailey, Walter S...................122 Grant St., Niles
Dalgleish, Archie J.........460 N. Main St., Wtaervliet
Doolittle, John E...........9 S. St. Joseph Avenue, Niles
Eidson, Hazel D. (L)...................Berrien Springs
Elghammer, Richard M...1850 Colfax Ave., Benton Harbor
Elliott, J. Colin..............802 E. Front St., Buchanan
Emery, Clayton S. (L)......1020 Niles Ave., St. Joseph
Emery, Wm. K.............1020 Niles Ave., St. Joseph
Faber, Michael........756 Pipestone St., Benton Harbor
Fattic, Grover R., Jr.........61 N. St. Joseph Ave., Niles
Feeley, Marshall J...........2516 Niles Ave., St. Joseph
Friedman, Morris E.............Barton St., New Buffalo
Galles, James O.............275 Paw Paw Ave., Coloma
Garrett, Evan L.............61 N. St. Joseph Ave., Niles
Gillette, Clarence (L)......R. F. D. 4, M. 60 W., Niles
Gonzalez, C. G...............2821 Sunnydale, St. Joseph
Gould, Samuel H.......1850 Colfax Ave., Benton Harbor
Grayson, Chas. J..............4 Maple St., Three Oaks
Green, Barbara G.........2600 Morton Street, St. Joseph
Green, Robt. L...........2600 Morton Street, St. Joseph
Grundset, Harold M.........61 N. St. Joseph Ave., Niles
Guaty, Nestor C.......858 Pipestone St., Benton Harbor
Gustin, Ralph D...........P.O. Box 159, Berrien Springs
Hassan, D. Kent...............802 E. Front St., Buchanan
Haupt, Edward C.........687 E. Empire, Benton Harbor
Hayes, Thos. P................2821 State St., St. Joseph
Henderson, Fred C.....................703 E. Main, Niles
Hershey, Noel J...................P.O. Box 222, Niles
Hills, David W.................2821 State St., St. Joseph
Howard, Frank W.........736 Pipestone, Benton Harbor
Hudnutt, Dean................811 Myrtle St., St. Joseph
Huff, Harold D........................126 Main St., Niles
Irgens, Edwin R.....11 Peoples St. Bk. Bldg., St. Joseph
Jochems, Dirk G.............324 E. Dewey, Buchanan
Johnston, Wm. H.............715 Market St., St. Joseph

elsall, Harvey I.............1600 Niles Ave., St. Joseph
enfield, W. J. (A)........505 Pleasant St., St. Joseph
ennedy, F. Alan......315 Fidelity Bldg., Benton Harbor
ilic, Orhan......................1060 Allouez Dr., Niles
ing, Frank A., Jr.........858 Pipestone, Benton Harbor
los, Henry J............2700 Highland Ct., St. Joseph
andgraf, Robt. L.........................P.O. Box 222, Niles
earned, David W.....645 Riverview Dr., Benton Harbor
ee, Hai Soon..............711 Beechwood Drive, Niles
eva, John B...........1122 Salem Ave., Benton Harbor
indenfeld, Fredk. H.........8 N. St. Joseph Ave., Niles
ininger, Richard E........2712 Highland Ct., St. Joseph
inn, Frank...........................2522 Niles, St. Joseph
ocey, Robert P...164 Higman Park Rd., Benton Harbor
acias, Rafael..............8 N. St. Joseph Ave., Niles
anning, John T.......1150 Miami Rd., Benton Harbor
cLelland, J. T.............Mercy Hosp. X-Ray Dept., Benton Harbor
esirow, Stanley M...687 E. Empire Ave., Benton Harbor
oore, T. Scott......................P.O. Box 416, Niles
amtze, Chan.........................1111 Oak St., Niles
'Toole, John............133 E. Napier, Benton Harbor
zeran, Chas. J...........127 E. Napier, Benton Harbor
adelford, Wm. J...........................South Lyon
ayne, Charles E.......925 Pipestone St., Benton Harbor
eshka, David K...........61 N. St. Joseph Ave., Niles
olansky, Sanford........84 W. Main St., Benton Harbor
orter, Chas. B.........1589 Colfax Ave., Benton Harbor

Pritchard, Harold M...................1649 Cass, Niles
Quadir, Syed A...............113 N. Portage, Buchanan
Rambo, Joseph J...............555 Lake St., Bridgman
Ray, Dean K.......................2522 Niles, St. Joseph
Reagan, Robt. E...........232 Windsor, Benton Harbor
Rizzo, Albert...............2821 S. State St., St. Joseph
Ruth, J. Griswold......507 Britain Ave., Benton Harbor
Skinner, James W.........460 Ridgeway St., St. Joseph
Smith, W. B.............133 E. Napier, Benton Harbor
Sori, Manuel R.........858 Pipestone St., Benton Harbor
Sowers, Bouton F. (A)..236 Higman Park, Benton Harbor
Strayer, John W...................P.O. Box 222, Niles
Stulik, Chas. K. (L)......Town Line Rd., P.O. Box 98, Union Pier
Turner, John J.............2817 S. State St., St. Joseph
Urist, Maurice D.......454 Pipestone St., Benton Harbor
Valantiejus, John A...........R.R.2, Cedar Lane Farm, New Buffalo
Van Hise, L. Z. R.....101 N. Main St., Berrien Springs
Vasquez, Andres H.....Chikaming Medical Ctr., Harbert
Vastine, Russell J...........430 W. Chicago, Buchanan
Watkins, Richard W. (L)..131 E. Napier, Benton Harbor
Westervelt, H. O. (L)......539 Pearl St., Benton Harbor
Willson, Dean.............756 Pipestone, Benton Harbor
Wilson, Clinton W.....925 Pipestone St., Benton Harbor
Wise, Warren A..............505 Pleasant St., St. Joseph
Woodford, Hackley E.......599 E. Main, Benton Harbor
Zick, Luther H.............2522 Niles Ave., St. Joseph

BRANCH COUNTY MEDICAL SOCIETY (30)

ldrich, Napier S..........162 Marshall St., Coldwater
acon, Charles R.........300 E. Chicago St., Coldwater
ailey, James E., Jr.......300 E. Chicago St., Coldwater
eatty, James B...........300 E. Chicago St., Coldwater
urke, James M.......................R. 4, Coldwater
oates, Carl A.......135 Stringtown, R. F. D. 1, Quincy
ulver, Dean T...........173 E. Chicago St., Coldwater
raser, Robt. J..................22 W. Pearl St., Coldwater
eib, Ormond D.......State Home Tng. Sch., Coldwater
omley, Henry C..........108 E. Chicago St., Bronson
effelfinger, John C.........292 E. Chicago St., Coldwater
oeksema, Ronald H.....292 E. Chicago St., Coldwater
eitch, Robt. M...............401 Ann St., Union City

Meier, Harold J. (L)........87 W. Pearl St., Coldwater
Mooi, Henry R...........292 E. Chicago St., Coldwater
Moss, Harvey L...................47 Carlyle, Coldwater
Nettleman, Wm. E............87 W. Pearl St., Coldwater
Olmsted, Kenneth L.............675 Monroe, Coldwater
Rennell, Edwin J.......Coldwater State Home, Coldwater
Rick, John J................61 E. Chicago St., Coldwater
Schillinger, H. K....................Box 148, Coldwater
Stewart, William K............403 Ann St., Union City
Thomas, James A.........390 E. Chicago St., Coldwater
Walton, Nathaniel J................Box 148, Coldwater
Weidner, Harold R...........50 Division St., Coldwater
Wise, Robert......State Hm. & Trng School, Coldwater

CALHOUN COUNTY MEDICAL SOCIETY (34)

gin, L. J. (A)........115 Territorial S.W., Battle Creek
lbright, Arnold A...........R. 1, Box 300, Battle Creek
llen, R. H.......................191 College, Battle Creek
mos, Norman H.......710 North Avenue, Battle Creek
mos, Norman O.......710 North Avenue, Battle Creek
nderson, Harold E.....501 Post Building, Battle Creek
rnold, George K. (A)........V. A. Hospital, Ft. Custer
zuela, Victor..........185 N. Washington, Battle Creek
akken, Richard L.........200 College St., Battle Creek
arden, Stuart P................Leila Hosp., Battle Creek
aribeau, Roy H. (L).............65 W. Michigan Ave., Battle Creek
ecker, Harry F. (L)............Box 547, Battle Creek
erghorst, John (A)........V.A. Hospital, Battle Creek
onifer, Philip P., Jr...401 Security Bk. Bldg., Battle Creek
onifer, Philip P...........231 North Ave., Battle Creek
oswell, David E.......105 N. Jefferson Ave., Marshall
rown, Robt. W..........231 North Avenue, Battle Creek
uell, Martin F. (A)..........V. A. Hospital, Ft. Custer
ampbell, Alice F...........103 E. Mulberry St., Albion
ampbell, Jack S.........1018 North Ave., Battle Creek
ampbell, Richard J.........154 West St., Battle Creek
apron, M. J., Jr.....806 Security Bk. Bldg., Battle Creek
aviness, L. Harold....185 N. Washington, Battle Creek
handler, Edward M.........411 Mich. Nat. Bk. Bldg., Battle Creek
hynoweth, Wm. R. (L)....207 Post Bldg., Battle Creek
oakes, Jack E..................112 W. Mansion, Marshall
olquhoun, Graham F.......188 College St., Battle Creek
ram, Ralph A.................500 S. Ionia St., Albion
urry, Robt. K.................................Homer
aly, Harold L., Jr..............500 S. Ionia St., Albion

Daly, Mary.........................201 River St., Albion
Daly, Miriam S.....................500 S. Ionia St., Albion
Diamante, Paul J.......710 North Avenue, Battle Creek
Dickson, Albert R. (L)..250 Champion St., Battle Creek
Dodge, Warren M., Jr. (R)..75 Laurel Dr., Battle Creek
Fairbanks, Stephen..............306 S. Superior, Albion
Ferazzi, Patrick S.........1018 North Ave., Battle Creek
Finch, Duward L.....719 Capital Ave. S.W., Battle Creek
Fisher, Robt. E.....1501 W. Michigan Ave., Battle Creek
Fraser, Robert H. (L) 25 W. Michigan Ave., Battle Creek
Funk, L. D....................133 W. Burr Oak, Athens
Giddings, A. M. (L)....103 Dieker Pl., St. Marys, Ohio
Gieser, E. Paul, Jr..................407 Alton, Battle Creek
Gilfillan, Margery J. (L)...............125 56th Ave. S., St. Petersburg, Fla.
Girardot, John G.........25 W. Michigan, Battle Creek
Glotfelty, Philip R.........219 N. Madison St., Marshall
Gough, Joseph G...American Legion Hosp., Battle Creek
Graubner, Franklin L.....Bogar Theater Bldg., Marshall
Gray, J. Alan....309 Mich. Natl. Bk. Bldg., Battle Creek
Griffith, Jack C...616 Mich. Nat. Bnk. Bldg., Battle Creek
Halac, Mehmet E.........163 North Ave., Battle Creek
Hamady, Alfred..........1018 North Ave., Battle Creek
Hansen, Edwin L...............216 North Ave., Battle Creek
Hansen, Harvey C.....65 W. Michigan Ave., Battle Creek
Henderson, Philip M...............109 W. Erie, Albion
Henriksen, J. D................4 Hiawatha, Battle Creek
Hibbs, Donald K.......117 Sunnyside Dr., Battle Creek
Hickman, Marjorie J. (A)..147 Viking Ct., Battle Creek
Holtom, Benj. G........815 Security Tower, Battle Creek
Hooker, Lyle T. (A)........V.A. Hospital, Battle Creek

Hubly, James W.................777 S.E. Second Ave., Deerfield Beach, Fl.
Humphrey, Archie E.......864 E. Michigan St., Marshall
Humphrey, Arthur A.......175 College St., Battle Creek
Humphrey, Herbert E.......122 N. Madison St., Marshall
Huntington, John..........710 North Ave., Battle Creek
Jacobson, Dwight..411 Michigan Nat'l Bank, Battle Creek
Jeffrey, James R. (L)..........179 N. Washington Ave., Battle Creek
Johnson, Melvin, Jr...........Leila Hospital, Battle Creek
Jones, Aubrey H. (A)..........V.A. Hospital, Ft. Custer
Jones, Ernest F. (A)......175 Island Ave., Battle Creek
Jones, Tyre K..................118 W. Green, Marshall
Keeler, Kenneth B. (R)........417 Elizabeth St., Albion
Kelleher, Geo. T...........235 North Ave., Battle Creek
Kinde, Matthew R...........250 Champion, Battle Creek
Kingsley, Paul C.............191 College, Battle Creek
Klopp, Edward J...........173 College St., Battle Creek
Lakke, Gordon W.......710 North Avenue, Battle Creek
Lam, Francis L.....408 Capital Ave. S. W., Battle Creek
Lancaster, Vance B.........710 North Ave., Battle Creek
Lanuti, Frank..........147 Viking Court, Battle Creek
Ledrew, Frederick (A)......V.A. Hospital, Battle Creek
Levy, Jos., Jr............231 North Ave., Battle Creek
Lewis, Welcome B. (L)........196 Irving Park Drive, Battle Creek
Long, Walter B..............................Homer
Lowe, Kenneth H.........231 North Ave., Battle Creek
Lowe, Stanley H. (R)....12 Hiawatha Dr., Battle Creek
Lund, C. A. E.........135 Hamblin Ave., Battle Creek
Maurer, James J...616 Mich. Natl. Bk. Bldg., Battle Creek
McCuaig, Alfred G...719 Capitol St. S. W., Battle Creek
McGee, John W.................105 Irwin Ave., Albion
Melges, Fredk. J.....25 W. Michigan Ave., Battle Creek
Mitton, Orland W. (R)..........9026 Clairmont N.E., Albuquerque, N. Mex.
Morrison, Donald B.....719 Capitol S. W., Battle Creek
Mullenmeister, H. F.....275 Capital N.E., Battle Creek
Murillo, Casmir........235 North Avenue, Battle Creek
Norgan, Anne F.....719 Capital Ave. S.W., Battle Creek
Patrick, Gilbert T.....25 W. Michigan Ave., Battle Creek
Patt, Albert J.....Battle Creek Sanatarium, Battle Creek
Pearson, Donald J.........255 North Ave., Battle Creek
Pier, Clarence T. (A)......V.A. Hospital, Battle Creek
Pipe, Lawrence D. (M)....Leila Hospital, Battle Creek

Powell, C. E.............632 North Ave., Battle Creek
Powell, Donna (A)..........V. A. Hospital, Ft. Custe
Power, John R...............154 West St., Battle Creek
Reizner, Bernard Z...........Oaklawn Hospital, Marshal
Robbert, John ....191 College, Battle Creek
Roberge, Jerome T...1001 Security Bk. Bldg., Battle Creek
Rorich, Wilma C. W. (R)..........166 N. E. Capitol Battle Creek
Rowan, Russell C...............500 S. Ionia St., Albion
Royer, Clark W.....1331 W. Michigan Ave., Battle Creek
Ryan, Chas. J.................Leila Hosp., Battle Creek
Seifert, Charles (M).................6231 Peace Pipe San Antonio, Texas
Sharp, Ara D. (R)..............502 Irwin Ave., Albion
Shellenberger, H. M. (R)....123 S. Jefferson, Marshal
Shipp, Leland P.......25 W. Michigan Ave., Battle Creek
Sibilsky, A. Clark (A)....281 Honey Lane, Battle Creek
Simpson, Robt. S.....700 Capital Ave. S.W., Battle Creek
Slagle, Geo. W. (L)..203 Capital Ave. N.E., Battle Creek
Spencer, Collis M...........308½ S. Superior St., Albion
Stadle, Wendall H. (R)..........607 Jennings Landing Gougac Lake, Battle Creek
Stephenson, C. D...........154 West St., Battle Creek
Stiefel, Richard A.....25 W. Michigan Ave., Battle Creek
Strohmenger, Frank J...........500 S. Ionia St., Albion
Taylor, Clifford B...............500 S. Ionia St., Albion
Tazelaar, Myron A.........219 N. Madison St., Marshall
Thompson, Walter C...Battle Creek Htl. Ctr., Battle Creek
Vander Kamp, Harry (A)....V.A. Hospital, Battle Creek
Vander Voort, Wm. V. (L)............R. 4, Hastings
Verity, Lloyd E. (R)......36 Parkside Dr., Battle Creek
Vetne, Gunnar..........725 Capitol S.W., Battle Creek
Walker, Chas. S.....709 W. Van Buren St., Battle Creek
Walters, John F...........163 North Ave., Battle Creek
Walters, Wm. D...........175 College St., Battle Creek
Wemmer, Keith S...1472 W. Michigan Ave., Battle Creek
Wencke, Carl G. (L)......112 Brewer Dr., Battle Creek
Winslow, Sherwood B.....710 North Ave., Battle Creek
Worgess, Duane R...799 Capital Ave. N.E., Battle Creek
Yannitelli, S. A...........710 North Ave., Battle Creek
Young, John R.....719 Capital Ave. S.W., Battle Creek
Zaplitny, R. B.............163 North Ave., Battle Creek
Zaplitny, Sophia (A)........R. 3, Box G5 A, Battle Creek
Zheutlin, Bertram..........50 Adams St., Battle Creek
Zindler, Geo. A...1201 Security Bnk. Bldg., Battle Creek

CASS COUNTY MEDICAL SOCIETY (38)

Adams, Uriah M...........................Marcellus
Clary, Rudolph I.............216 S. Front St., Dowagiac
Comstock, L. David, Jr.......417 W. High St., Dowagiac
Guzzo, Henry V.........110 W. Division St., Dowagiac
Hickman, John K.........108 W. Division St., Dowagiac

Loupee, Geo. E.............114 West Street, Dowagiac
Loupee, Sherman L. (L)........108 Orchard, Dowagiac
Pierce, Frank L. (L)......142 S. Front Street, Dowagiac
Pierce, Kenneth C...........417 W. High St., Dowagiac
Warren, Aaron K.............109 School St., Cassopolis

CHIPPEWA-MACKINAC COUNTY MEDICAL SOCIETY (42)

Allott, Hugh R.........816 Ashmun St., Sault Ste. Marie
Bandy, Festus C. (R)..2431 Hamlin Lane, Sarasota, Fla.
Blair, H. Milton..........300 Court St., Sault Ste. Marie
Clausen, Claire H.........300 Court St., Sault Ste. Marie
Coulter, Wm. J.......................Drummond Island
Finlayson, Donald D...301 E. Spruce St., Sault Ste. Marie
Hagele, Marie A.........126 Park Pl., Sault Ste. Marie
Hamel, Herbert E..........................St. Ignace
Harrington, Harvey M. (L)....Box 319, Sault Ste. Marie
Heilman, Robert D..............War Memorial Hosp., Sault Ste. Marie
Howe, Donnell C., Jr.....300 Court St., Sault Ste. Marie
Mackie, Thos. B.........300 Court St., Sault Ste. Marie

McBryde, Lyman M...416 Ashmun St., Sault Ste. Marie
Mertaugh, Wm. F...104 W. Spruce St., Sault Ste. Marie
Montgomery, Benj. T. (L)............812 Ashmun St., Sault Ste. Marie
Reddick, C. E.............Chippewa Co. Health Dept., Sault Ste. Marie
Rhind, Earl S...........Sault Polyclinic, Sault Ste. Marie
Scott, Dale............816 Ashmun St., Sault Ste. Marie
Solomon, Joseph A.....................Mackinac Island
Thompson, Chas. F. (L)............Drummond Island
Trapasso, Tony J...........816 Ashmun, Sault Ste. Marie
Tygart, Robert L.......301 E. Spruce, Sault Ste. Marie
Venier, Anton G.......816 Ashmun St., Sault Ste. Marie
Wedding, Erling S.....203 Hudson Dr., Sault Ste. Marie

CLINTON COUNTY MEDICAL SOCIETY (46)

Bennett, Geo. W................203 W. Main St., Elsie
Cook, Bruno C..........................Westphalia
Fillinger, Wells B. (L)..............................Ovid
Foo, Chas. T. (L)....1716 30th St. W., Bradenton, Fla.
Grost, James M.....................Park Avenue, St. Johns
Henthorn, Arthur C. (L)............Box 216, St. Johns
Russell, Sherwood R.......104 N. Oakland St., St. Johns

Scott, James S..............................DeWitt
Sheline, Victor L.................Medical Center, Ithaca
Slagh, Earl M.....................................Elsie
Smith, Franklin W.............205 W. State, St. Johns
Stephenson, Wesley F.......510 E. Walker St., St. Johns
Stoller, Paul F...................................St. Johns

DELTA-SCHOOLCRAFT COUNTY MEDICAL SOCIETY (50)

Anderson, Francis C...........218 S. 10th St., Escanaba
Bernier, A. Barroso......547 Michigan Ave., Manistique
Bash, Theodore L...........................Bark River
Benson, Gilbert W. (A)........Ludington St., Escanaba
Boyce, Donald H.........1107 Ludington St., Escanaba
Cretens, Mary....Delta Menominee Hth. Dpt., Escanaba
Dehlin, James R...............8 S. 11th St., Gladstone
Fitch, Donald N...........804 Ludington St., Escanaba
Fyvie, James H.............202 S. Cedar St., Manistique
Gordon, E. James............117 N. 22nd St., Escanaba
Groos, Harold Q.............1015 S. 1st Ave., Escanaba
Groos, Louis P..............1015 S. 1st Ave., Escanaba
Hockstad, Raymond........804 Ludington St., Escanaba
Hult, Otto S...............1005 Delta Ave., Gladstone
LaSorsa, Armand M............................Manistique
Le Mire, Donald F.........1104 S. First Ave., Escanaba
Le Mire, William A..........1106 First Ave. S., Escanaba
Lindquist, Norman L.........205 S. Tenth St., Escanaba
Maniaci, Geo................8 South 11th St., Gladstone
McInerney, Thos A.........1221 Ludington St., Escanaba
Olson, Carl J.....................8 S. 11th St., Gladstone
Ryde, Robt. E................1221 Ludington, Escanaba
Theisen, Nikolaus J.......1400 16th Avenue S., Escanaba
Waters, Duane L...........200 S. Cedar St., Manistique
Wehner, Merle E.............131 River St., Manistique
Whipple, Arno...........117 North 22nd St., Escanaba

DICKINSON-IRON COUNTY MEDICAL SOCIETY (54)

Addison, Earl R.........412 Superior Ave., Crystal Falls
Alexander, Wm. H.........411 East C St., Iron Mountain
Anderson, Donald T.......408 Hamilton Ave., Kingsford
Boyce, George H. (L)..........First Natl. Bank Bldg., Iron Mountain
Boyce, George H,. Jr. (A)..700 Hamilton Ave., Kingsford
Carlson, Ralph E.....500 Stephenson Ave., Iron Mountain
Cecconi, R. D.....Commercial Bank Bldg., Iron Mountain
Cooper, Chas. A...................Box 542, Stambaugh
Gendzwell, Joyce......805 Vulcan Street, Iron Mountain
Gladstone, Wm. R., Jr...........804 Main St., Norway
Gorham, Arwin.................U. S. 2, Iron Mountain
Hayes, Willard N................720 N. Main St., Norway
Huron, Willis H.........106 West B St., Iron Mountain
rvine, Lionel E...................Box 438, Iron River
acobs, Donald J.......Professional Bldg., Iron Mountain
Kofmehl, Wm. J...........................Stambaugh
McEachran, Hugh D.............500 Stephenson Ave., Iron Mountain
Nora, James C.............15 Eighth Avenue, Iron River
Pieper, Ernest..........................Iron Mountain
Retallack, Russell C.......326 W. Genesee St., Iron River
Roberts, Warren J. (A).............1020 Carpenter Ave., Iron Mountain
Schmutzler, Walter A...373 Woodward St., Iron Mountain
Schroeder, John M.........Khoury Bldg., Iron Mountain
Sherk, Douglas..............412 Superior, Crystal Falls
Smith, Donald R...............Box 471, Iron Mountain
Steinke, Chas. G.....517 Stephenson Ave., Iron Mountain
Stelle, Robert E.............412 Superior, Crystal Falls
Trump, Paul L..................808 Terrace, Kingsford
Wollum, Arnold (A).......................R. 1, Vulcan

EATON COUNTY MEDICAL SOCIETY (58)

Berg, Richard H...............162 Second St., Sunfield
Brown, Byron P.............339 S. Cochran, Charlotte
Butler, Vernon C.............201 Marilin, Eaton Rapids
Carothers, Danl. J...........125 Lansing St., Charlotte
Curtis, Keith L...............202 S. Cochran, Charlotte
De Land, C. Le Roy..........................Olivet
Erhard, O. Stewart..........301 Rancho, Eaton Rapids
Garlock, Fred C.......406 E. Jefferson St., Grand Ledge
Harrod, Gordon R.......................Grand Ledge
oseph, Daniel D...............R. 1, Box 25, Charlotte
Matthews, R. W..........236 S. Main Street, Charlotte
Meinke, Albert H., Jr.....800 Cumberland, Eaton Rapids
Myers, Albert W..........................Potterville
Passos, Benjamin A...........304 N. Cochran, Charlotte
Riley, Jos. L..................201 S. Cochran, Charlotte
Robinson, S. R...........1140 Willow St., Grand Ledge
Sevener, Lester G.............236 S. Main St., Charlotte
Sherman, Eber B...........P.O. Box 158, Eaton Rapids
Van Ark, Bert..................511 Hale, Eaton Rapids
Van Ark, Herman F..................Eaton Rapids
Willits, Clayton O...............127 Upland, Charlotte

GENESEE COUNTY MEDICAL SOCIETY (62)

Abbott, R. Roderick......4101 Greenbrook Lane, Flint
Adams, Albert C.........G 7194 E. Court St., Davison
Adams, Burnell H.............609 S. Lynch St., Flint 3
Amato, Robt. M........X Ray Dept. Hurley Hosp., Flint
Anderson, Harley H.....11820 N. Saginaw, Mt. Morris
Anderson, John L.............2765 Flushing Rd., Flint 4
Anderson, Robert E..........2136 S. Seventh, Ann Arbor
Antell, Richard A.............2733 Crestwood Dr., Flint
Anthony, Geo. E. R.............1015 Detroit St., Flint 4
Baird, W C.laire..............2765 Flushing Rd., Flint
Bald, Fredk. W...............410 S. Ballenger, Flint 3
Barbour, David A..................5369 Briarcrest, Flint
Barbour, Fleming A...........2015 Lincoln Dr., Flint 3
Baske, Franklin W..............923 Maxine St., Flint 3
Batdorf, Joseph T.......11325 S. Saginaw, Grand Blanc
Bateman, Lawrence G...........1928 Lewis St., Flint 6
Beck, Douglass R.......1450 Country View Ln., Flint 7
Becker, Eugene B...........2765 Flushing Rd., Flint 4
Benkert, Jack........6211 Lake Forest Dr., Grand Blanc
Benson, John C.................402 W. 2nd St., Flint 3
Berman, Harry................3309 Fenton Rd., Flint 7
Berner, Gerald P...............2765 Flushing Rd., Flint
Bernstein, Eli N...............311 E. Court St., Flint
Berry, Robert E. L...........715 Mott Fdn. Bldg., Flint
Best, J. A.........................3803 Clio Rd., Flint 4
Beyer, Geo. D..................G 3337 W. Vienna, Clio
Biedlingmaier, G. J.....12511 Via Catherina, Grand Blanc
Bishop, Don L. (R)..........1024 Woodside Dr., Flint
Bogart, Leon M. (L)...........503 National Bldg., Flint
Bolduc, Gregoire....................325 E. First St., Flint
Boles, Wm. P. (L)...............714 Beach St., Flint 3
Bosker, Donald...............1620 N. Franklin, Flint 3
Bota, Robert A...................1623 Montclair, Flint
Boyer, Peter R............100 Medical Arts Bldg., Flint
Bradley, Robt. M.........1112 Mott Fdn. Bldg., Flint, 2
Brain, Roy G. (L)..........460 S. Saginaw St., Flint 3
Branch, Hira E.............821 Mott Fdtn. Bldg., Flint
Brasie, Donald R. (R)........R. 2, Box 436, Roscommon
Briggs, Guy D. (L)............224 E. Court St., Flint 3
Brown, Clarence A.............2765 Flushing Rd., Flint
Bryant, Donald R...........621 Mott Fdtn. Bldg., Flint
Buchanan, Gerald S...........211 S. Saginaw St., Holly
Buchanan, Wm. F.............238 W. Caroline, Fenton
Burkett, Leeslie V................121 E. 7th St., Flint 3
Canada, Donald R................218 E. Court St., Flint
Cassan, Stanley M................311 E. Court St., Flint
Chambers, Myrton S.......3402 Westwood Pkwy., Flint 3
Chardoul, Eugene N...........202 Paterson Bldg., Flint
Chase, Wm. D.........1318 N. Ballenger Hwy., Flint 4
Clark, Robt. L................1301 Flushing Rd., Flint 4
Cole, Gerald G...............1818 Longway Blvd., Flint
Collins, James I.............G 1128 N. Dye Road, Flint
Colwell, Clifford W.........328 S. Saginaw St., Flint 3
Conover, Geo. V........207 Genesee Bank Bldg., Flint 2

Conover, McClellan B...........724 East Street, Flint 3
Cook, Frank W...........208 Geneesee Bank Bldg, Flint
Cook, Henry (L).......208 Genesee Bank Bldg., Flint 2
Cook, John L...............813 Mott Fdn Bldg., Flint 7
Cookingham, Cory E.........208 Med. Arts Bldg., Flint
Coriasso, Louis B.........1515 W. Atherton Rd., Flint 4
Coyne, Kenneth M................325 E. First St., Flint
Craig, William G...........G 3176 W. Court St., Flint
Cross, Robert L.......................6029 Marja, Flint
Curry, Geo. J. (L)...........346 S. Saginaw St., Flint 3
Cutler, G. Campbell...........420 S. Ballenger, Flint 4
Damm, John R..............8483 Holly Rd., Grand Blanc
Davis, Robt. C...........G 3029 Flushing Rd., Flint 4
Dawson, Ralph E............721 W. Sixth Ave., Flint 4
Delzingro, Nicholas (L)..........328 Main St., Davison
Dettman, Carlton K........12023 N. Seymour, Montrose
Dickstein, Bernard..........605 National Bldg., Flint 3
Diggs, Roy D., Jr.............5001 N. Saginaw St., Flint
Dismond, Samuel R...........1402 S. Saginaw St., Flint
Dodds, Fredk. E. (L)..........1336 Lewis St., Flint 6
Dodds, Max E.............625 S. Grand Traverse, Flint
Dooley, James F.....6479 Carriage Hill Dr., Grand Blanc
Drewyer, Glenn E...620 S. Armada Rd., Venice Fl. 33595
Dwyer, William F..........625 S. Grand Traverse, Flint
Dykewicz, Richard A.........2768 Flushing Rd., Flint 4
Eaton, Wayne L................2765 Flushing Rd., Flint
Eichhorn, Ernest M..........2765 Flushing Rd., Flint 4
Eickhorst, Thos N...........2765 Flushing Rd., Flint 4
Elliott, Hardie B...........503 S. Saginaw St., Flint 3
Engelman, Raymond M...103 Medical Arts Bldg., Flint 4
Ergin, Nevit O...........1207 N. Ballenger Hwy., Flint
Ettinger, Ralph D...........238 W. Caroline St., Fenton
Failing, John F., Jr...............Hurley Hospital, Flint
Fan, Q. C.....................2002 E. Court St., Flint
Farah, Ben S.................2765 Flushing Rd., Flint 4
Farhat, Maynard M..............505 W. Court St., Flint
Fee, Manson G..................108 E. Kearsley, Flint 3
Fernandez, Jose A...........806 W. Sixth Avenue, Flint
Ferris, James W. ....426 N. State St., Davison
Finkelstein, Theo.........1415 Broadway Blvd., Flint 6
Fitch, Robert E.......................1005 Leith, Flint 2
Forbis, Orie L.................806 W. Sixth Ave., Flint
Forrer, Graydon R...........2279 E. Grand Blanc Rd., Grand Blanc
Fuller, Harvey T. (R)................Route 1, Bellaire
Goldberg, E. Marshall............Hurley Hospital, Flint
Gelenger, Stephen M. (A)......2125 Detroit St., Flint 5
Gerras, George Z.............1909 Lynbrook Dr., Flint
Gibbons, James J...........101 Medical Arts Bldg., Flint
Goering, George R. (L)............2601 Norbert, Flint
Goetz, Margarete M. (A)......213 Paterson Bldg., Flint
Goetz, Rudolph..............1221 Church Street, Flint
Goldberg, E. Marshall............Hurley Hospital, Flint
Golden, Evelyn..................218 E. Court St., Flint
Golden, H. Maxwell..........218 E. Court St., Flint 3
Gorne, Saul S..................619 Clifford St., Flint 3
Griffin, Ernest P., Jr...........1505 Arrow Lane, Flint 7
Grommons, Jack R.............721 W. Sixth Ave., Flint
Grover, Harold F. (L)......601 S. Saginaw St., Flint 3
Guile, Gurdon S...............1621 Dupont St., Flint 4
Gullekson, Edwin H. (A)......2765 Flushing Rd., Flint
Gumpper, C. R.........4437 Moorish Rd., Swartz Creek
Gundry, Geo. L. (L).....,..............Grand Blanc
Gutow, Isadore H...........2765 Flushing Rd., Flint 4
Gutow, Richard F. (A)..............P. O. Box 6085, Denver, Co. 80240
Gutowitz, Erwin..........420 S. Ballenger Hwy., Flint
Guyon, Joseph F...........302 W. Pierson Road, Flint
Guyon, Mary A. W...........302 W. Pierson Rd., Flint
Hackley, Richard D.....1818 R. L. Longway Blvd., Flint
Hague, Robt. F................210 E. Court St., Flint 3
Hallitt, John Wm...........102 Medical Arts Bldg, Flint
Harper, Robt. H...............713 Thomson St., Flint 3
Harris, Bernard J.................1750 Lynbrook, Flint
Harris, Donald R...............2429 Welch Blvd., Flint
Hauser, Fredk. V.........1015 Mott Fdtn Bldg., Flint 2
Hawkins, James E...............4618 Roberts St., Flint
Heine, John..............302 Medical Arts Bldg., Flint
Heinemann, Herman J........G7316 Calkins Rd., Flint 7
Helcher, Phyllis O.........G 5303 Flushing Rd., Flushing
Helferty, Robert D..............1116 Ann Arbor St., Flin
Helmer, Fredric A. (A)..............2606 East Drive Ft. Wayne In. 4680
Hennessy, Charles R.........517 Mott Fdtn. Bldg., Flin
Hiscock, Harold H. (L)....503 S. Saginaw St., Flint
Hockman, Thomas A...11125 Old Bridge Rd., Grand Blan
Hodges, Frank V...............Hurley Hospital, Flint
Hollis, John W...........Fisher Body Div., Grand Blan
Hooper, Virgil R.................4230 Trumbull. Flin
House, Robert J.............5481 Sugarbush Lane, Flin
Hubbard, Wm. B.............1205 Maxine St., Flint
Hubbard, Wm. C...........302 Paterson Building, Flin
Hufton, Wilfrid L...........2765 Flushing Rd., Flint
Hunt, Richard J.....6259 Lake Forest Dr., Grand Blan
Hurd, Clayton E...............205 Lincoln St., Fento
Irish, Lawrence R..............346 Allendale Pl., Flin
Jacoby, John S...............4300 S. Saginaw St., Flin
James, Robt. E..................1515 W. Atherton, Flin
Janke, Walter H.......603 Mott Foundation Bldg., Flin
Johnson, A. H., Jr...............3219 North St., Flint
Johnson, Frank D.........625 S. Grand Traverse, Flin
Johnson, Raymond E...5173 W. Reid Rd., Swartz Cree
Jordan, Paul H...1125 Jordan Lane R. 2, Grand Blanc
Judd, Alvin E.................1620 N. Franklin, Flint
Karr, Paul H...................3416 Lapeer Rd., Flin
Kaufman, Lewis D.........4002 N. Saginaw St., Flint
Kelly, James E.................2765 Flushing Rd., Flin
Kennett, Donald M.....315 Bella Vista Dr., Grand Blan
Kimbrough, C. B...........1402 S. Saginaw St., Flint
Kirsten, Walter T...32919 Rosenbusch Dr., Warren 4809
Kitto, Harold J.....................902 Stockdale, Flin
Kline, O. F.................2765 Flushing Rd., Flint
Knapp, Wm. D..............503 S. Saginaw St., Flint
Knoblich, Roman R.............Hurley Hospital, Flint
Koop, Chester S...........1372 N. Ballenger Hwy, Flint
Kreel, Boris W...........11610 Hazel St., Grand Blan
Kretchmar, Arthur H.......625 S. Grand Traverse, Flint
Kurtz, John J. (L)..230 Bevely Rd., W. Palm Beach, Fla
Laird, James I...............12010 Kipp Rd., Goodric
Laurel, Richard J.........1207 N. Ballenger Hwy., Flint
La Vielle, Carroll J...............Hurley Hospital, Flint
Leach, J. Leonidas (L)......5014 N. Saginaw St., Flint
LeMieux, Leslie L...........701 W. Dayton St., Flint 4
Levine, Mark C..............721 W. 6th Avenue, Flint
Lewis, Billie................739 Mott Fdn. Bldg., Flint
Lewis, Thos. E...............4071 Richfield Rd., Flint
Lewis, Vivian M..................1618 Kensington, Flint
Lieber, Robt. W...........6144 Pebbleshire Circ., Flint
Lightfoot, Arthur S...............4500 Detroit St., Flint
Limbach, David R...............900 Begole St., Flint 2
Lindman, Thomas C.............2484 Nolen Dr., Flint
Livesay, Jackson E. (L)......503 S. Saginaw St., Flint 3
Lundeen, Richard M....................3393 Clio, Flint
Lusk, John A.............9233 W. Davison Rd., Davison
Lyttle, Sydney N.....1207 N. Ballenger Hwy, Flint 48504
MacGregor, Delbert M. (R)............................
MacKenzie, J. W., Jr.....4437 Morrish Rd., Swartz Creek
Macksood, Albert J...........3169 W. Pierson Rd., Flint
Macksood, Jos. A...........3169 W. Pierson Rd., Flint 4
Macksood, William E.........3169 W. Pierson Rd., Flint
MacPhail, Albert A...........3302 Hawthorne Dr., Flint
Mangelsdorf, C. H...............G3393 Clio Rd., Flint
Manwaring, John T............1654 Seminole St., Flint 3
Markunas, Paul J.............4002 N. Saginaw St., Flint
Martin, James A.............812 S. Adelaide St., Fenton
Mathias, Berton J...........1301 Flushing Rd., Flint 4
McAlindon, J. D....................1601 Euclid, Flint
McClellan, Junius W.......Buick Motor Division, Flint 7
McGarry, Roy A. (L)........601 S. Saginaw St., Flint 3
McGrae, John D., Jr...........2433 Welch Blvd., Flint
McGregor, Allan R.........G 3337 W. Vienna Rd., Clio
McLeod, Kenneth W. A. ....2765 Flushing, Flint 48504
McMurray, Richard J..........2765 Flushing Rd., Flint
McNaughton, Donald W...........121 E. Seventh, Flint
McTaggart, David........625 S. Grand Traverse, Flint
Mendrek, H. H...........1639 Mott Fdn. Bldg., Flint 2
Michael, Sidney R..............922 Welch Blvd., Flint 4
Michaels, Robt. M..............2702 Flushing Rd., Flint
Michelson, Richard B.....2014 Robt. T. Longway, Flint 3
Miller, Loren E...............2645 Corunna Rd., Flint 3
Miltich, Anthony J.......915 S. Grand Traverse, Flint 3

Moeller, Jan C..............3102 Westwood Pky., Flint
Moore, Glenn E.................323 W. Second, Flint 3
Moore, Wesley P. (A)..........18040 Sorrento, Detroit
Morgan, Alan L.............3169 W. Pierson Rd., Flint
Morin, Paul.....................1968 Miller Rd., Flint
Morrissey, Vaughn H............101 Stockdale St., Flint 4
Mosier, Edward C...............115 Lake St., Otisville
Mueller, Willys F.................Hurley Hospital, Flint
Murphy, E. Grant..........1825 Chelsea Circle, Flint 3
Nassar, S. H.............8483 Holly Rd., Grand Blanc
Newman, Harry S...............302 E. Court St., Flint
Newton, Barabas (A)..........McLaren Hospital, Flint
Nicholls, Wm. W.............806 W. Sixth Ave., Flint 3
Nitz, Donald A.....1818 Robert T. Longway, Flint 48503
Odle, Ira D. (L)............201 Welch Blvd., Flint 4
Oldt, Mary Ruth..............602 S. Lynch St., Flint 3
Orr, John W. (L)..........Orrs Pt., Lk. Fenton, Fenton
Osher, Seymour L.............315 E. Court St., Flint 3
Pappalardo, Carlos............1458 Clairwood Dr., Flint
Parliament, Burt A.............314 Ferndale Pl., Flint 3
Pfeifer, Archibald C. (L)......9798 Palmetto Club Dr.,
Miami, Fla.
Phelps, Lynn A..........10122 Janaroy Ct., Goodrich
Phillips, A. F.........X Ray Dept., Hurley Hosp., Flint
Pickering, Woodrow H.....1602 Ballenger Hwy., Flint 4
Pike, Wallace W.........7514 Miller Rd., Swartz Creek
Platt, Alice Lee (A)..............1430 Eldorado, Flint
Portney, Jack E...............725 Stevens St., Flint 3
Pougnet, W. D................6155 Maple Ridge, Flint
Pratz, Oliver C. (L)..........1303 Detroit St., Flint 4
Preston, Otto J...........300 N. Chevrolet Ave., Flint 2
Price, Jack R.............410 S. Ballenger Hwy., Flint
Prior, Richard W................1266 S. LeRoy, Fenton
Purcell, F. L.....................Ternstedt Plant, Flint 5
Quin, John, Jr...............2765 Flushing Rd., Flint 4
Rabiah, Fouad..............1139 Mott Fdn. Bldg., Flint
Radcenko, Helen............302 W. Pierson Road, Flint
Radcenko, Leonid..........915 S. Grand Traverse, Flint
Ragan, Russell M...1715 East High St., Mt. Pleasant 48858
Rao, D. S. (A)................McLaren Hospital, Flint
Rapport, Richard L.............503 S. Saginaw, Flint 3
Rathburn, Robert J...........1501 Flushing Rd., Flint
Rawlings, John C.........115 Med. Arts Bldg., Flint 4
Rawlings, J. Mott...........1601 Neome Dr., Flint 3
Reid, John H...............1301 Flushing Rd., Flint 4
Reye, George H...2279 E. Grand Blanc Rd., Grand Blanc
Rice, Alan K.............2008 Robt. T. Longway, Flint
Rieth, Geo. F.................1406 Davison St., Flint 6
Roberts, Floyd A. (L)....327 Sheffield, Apt. 281, Flint 3
Rowe, John B................653 Saginaw St., Flint 3
Rulney, Max...............2765 Flushing Road, Flint 4
Rundles, Walter Z.......500 Grand Traverse St., Flint 3
Sampaio, Carlos A...........8020 Davison Rd., Davison
Sandberg, Russell G............2030 Pierce St., Flint 3
Sanocki, Fredk. E.............1651 Detroit St., Flint 3
Scavarda, Chas. J....................1106 Maxine, Flint
Schaefer, Richard K...........3248 Van Slyke Rd., Flint
Schiff, Benton A...............323 W. 2nd St., Flint 3
Schmidlin, Robt. W.........3710 Davison Rd., Flint 6
Schreiber, E. Oskar........2765 Flushing Road, Flint 4
Schroeder, Paul E............1673 N. Chevrolet, Flint
Schultz, J. Stanley............3327 Fleming Rd., Flint 4
Schwartz, John M...........1300 N. Dort Hwy., Flint
Schwarz, Heinz H....................1430 Eldorado, Flint
Scott, Robt. D. (L)..........G6226 W. Court St., Flint
Seven, Phillip G.................2301 Cummings, Flint
Seymour, Geo. D.........G7237 N. Saginaw, Mt. Morris
Shantz, Leighton O.....1497 Country View Lane, Flint 3
Sheeran, Danl. H...........610 S. Vernon Ave., Flint 3
Sherwood, Frederick........2765 Flushing Rd., Flint 4
Shields, John L.............234 W. Caroline St., Fenton
Simoni, Lewis E...........3210 S. Dort Hgwy., Flint 7
Sirna, Anthony R.........11219 Stonybrook, Grand Blanc
Smalley, R. H...........4437 Morrish Rd., Swartz Creek
Smith, Eugene C.......................606 Stevens, Flint
Smith, Harold O.................3769 Sunset Dr., Flint
Smith, Maurice J...........2801 N. Saginaw St., Flint 5
Smith, Sidney E...........625 S. Grand Traverse, Flint
Sniderman, Benj. F...............727 Beach St., Flint 3
Solik, A. E.......................311 E. Court St., Flint
Somach, Fredric M...........720 W. Sixth Avenue, Flint
Sorkin, Morris L.................718 Beach St., Flint 2
Sorkin, Saml. S..................718 Beach St., Flint 2
Sorscher, Alan J. (A)..........Keesler AFB, Biloxi, Ms.
Sparks, Harvey V. ....2765 Flushing Rd., Flint 4
Spindler, James R...........110 W. Center St., Hastings
Steffe, Ralph S.............2765 Flushing Rd., Flint 4
Steinman, Floyd H...........503 S. Saginaw St., Flint 2
Stevens, Philip K...........1116 Mott Fdtn. Bldg., Flint
Stevenson, Wm. W. (L)..1521 Arrow Lane, Flint 48507
Streat, Rudolph W. (L)..........218 E. 8th St., Flint 3
Stroup, Clayton K...........2002 E. Court St., Flint 3
Sullivan, M. R.........5352 Peppermill Rd., Grand Blanc
Sutherland, James K.............402 E. 3rd St., Flint 3
Sutton, Geo. D. (L)..........303 W. Court St., Flint 3
Tang, Gene D..................2765 Flushing Rd., Flint
Tauscher, John W.......2016 R. T. Longway Blvd., Flint
Theuerle, Walter I.........3101 N. Saginaw St., Flint 5
Thompson, Charles A.........4211 Comstock St., Flint 4
Thompson, Jack W...........2702 Flushing Rd., Flint 4
Thoms, Peter S...........1279 W. Coldwater Rd., Flint
Thorburn, Grant (L)..P. O. Box 387, Waynesboro, Pa.
Tofteland, Elmer H...........2765 Flushing Rd., Flint 4
Tower, Rita B. (L)............2801 Dort Hwy., Flint 7
Turcke, Allen F.................5717 Marja St., Flint 5
Turner, Merald G...........G 3169 W. Pierson, Flint 2
Tuuri, Arthur L..............Mott Children Clinic, Flint
Urich, Vernon..............3169 W. Pierson Rd., Flint
Van Duyne, Fredk. W............2849 Miller Rd., Flint
Van Harn, Raymond S.........1116 Ann Arbor St., Flint
Varney, Howard L.....1818 Robt. Longway Blvd., Flint
Vaughan, Edgar J.............319 S. Bridge St., Linden
Vergith, L. William...............399 Coutant, Flushing
Villarreal, V.....................3917 Kellar St., Flint
Wade, Franklin V...........1121 Mott Fdtn. Bldg., Flint
Walcott, Carver G...........201 E. Carolina St., Fenton
Walker, James D.....11325 S. Saginaw St., Grand Blanc
Walter, Daniel L..............820 Davison Rd., Davison
Ward, Nell M. (L)..........G4152 Carnation Ct., Flint
Weber, Robt. M.............3710 Davison Rd., Flint 6
Wentworth, John E.............420 S. Ballenger, Flint 4
Werness, Inga W. (L)........220 East Fourth St., Flint
West, George A.............6518 N. Saginaw St., Flint
Wheeler, J. D.......................2470 Nolen, Flint
White, Carl H...................106 River St., Fenton
White, Frank T...........5210 Lapeer Rd., Flint 48503
Whites, Jack C..............7343 Flushing Rd., Flushing
Willard, Robt. H................718 Beach St., Flint 3
Williams, T. Wendell..........5003 N. Saginaw, Flint
Williams, Wm. S. (L)....5216 S. Genesee, Grand Blanc
Willis, Robert E.............6606 N. Saginaw St., Flint
Wills, Thos N. (R).......................................
Wolcott, Nan D. (R)........7506 Lapeer Rd., Davison
Wolf, Melvyn D...........318 Medical Arts Bldg., Flint
Woodsides, K. T...........7343 Flushing Rd., Flushing
Wright, Donald R. (L)............326 Court St., Flint
Wright, Geo. W., Jr...........2765 Flushing Rd., Flint
Zeis, Myron G...................718 Beach St., Flint 2
Zelko, Daniel M...............4071 Richfield Rd., Flint

GOGEBIC COUNTY MEDICAL SOCIETY (66)

Albert, Saml. G..................103 Suffolk, Ironwood
Davidson, Donald L.........200 S. Sophie St., Bessemer
Franck, John R., Jr.........401 Sunday Lake, Wakefield
Gallo, Bela.....................Newport Clinic, Ironwood
Gertz, Michael A.........109 E. Aurora St., Ironwood
Gorilla, Allen C..................210 Suffolk, Ironwood
Harrington, Rex. R., Jr.......104 E. Ridge St., Ironwood
Lieberthal, M. J. (L)..........220 S. Suffolk, Ironwood
Lieberthal, Paul R......................Box 632, Ironwood
Medford, Lester........306 Sunday Lake St., Wakefield
Murphy, Percy J...............Seaman Bldg., Ironwood
Santini, Florian J...........109 E. Aurora St., Ironwood

GRAND TRAVERSE-LEELANAU-BENZIE COUNTY MEDICAL SOCIETY (70)

Bartone, John R...........217 S. Madison, Traverse City
Beall, John G...........1105 E. Front St., Traverse City
Berens, Burdette M...........................Kalkaska
Bolan, Ellis J..............................Suttons Bay
Brownson, Kneale M.........116 Cass St., Traverse City
Bushong, Benj. B.............116 Cass St., Traverse City
Campbell, Thomas D.............Box C, Traverse City
Cartwright, Wm. H.....1105 E. Front St., Traverse City
Clark, Oswald V...........1030 Sixth St., Traverse City
Cline, Theodore N...............999 6th, Traverse City
Cline, Warren W...................999 6th, Traverse City
Coleman, John F...........R. 1, Box 93, Traverse City
Dundon, Arthur F.................Box C, Traverse City
Edmonds, W. T...........Munson Hosp., Traverse City
Ellis, Claude I..............................Suttons Bay
Ferguson, John T.................Box C, Traverse City
Fiebing, Jack A............P.O. Box 283, Traverse City
Fishbeck, Wm. A.........1209 E. 8th St., Traverse City
Fox, Richard L............207 Circle Dr., Traverse City
Fulmer, Roger C.......9838 Peninsula Dr., Traverse City
Goodrich, Dwight (R)..601 W. Front St., Traverse City
Haberlein, Chas. R.........1100 Sixth St., Traverse City
Hall, James W.............1100 Sixth St., Traverse City
Hamilton, Earl E.........530 S. Union St., Traverse City
Herkner, Mildred L........119 Barlow St., Traverse City
Hubbell, Reader J. (L)....228 S. Madison, Traverse City
Huene, Nevin...........110 E. Front St., Traverse City
Huston, R. R. (L).......................Elk Rapids
Johnston, James D.........1100 Sixth St., Traverse City
Kamp, Robt. L.................................Beulah
Kaufman, James N.............427½ Main St., Frankfort
Kitti, William W.............................Kalkaska
Komesu, Seiichi..................Box C, Traverse City
Lemen, Charles E.........110 S. Madison, Traverse City
Lieding, Keith G.......7844 Peninsula Dr., Traverse City
Lossman, Robt. T.............J. Decker Munson Hosp.,
Traverse City
McClay, Adam C..........6330 Pen. Dr., Traverse City
Michael, Stanley L.........335 Davis St., Traverse City
Milliken, John G..........224 Circle Dr., Traverse City
Nickels, Mervyn M................Box C, Traverse City
Paterson, Roger.....................Box 367, Northport
Pelto, Maurice S.........Munson Hospital, Traverse City
Peterson, Wm. D.........876 E. Front St., Traverse City
Pike, Donald G.........1105 E. Front St., Traverse City
Ponczek, E. J.......Box C, State Hospital, Traverse City
Power, Frank H..............116 Cass St., Traverse City
Salon, Dayton D...........1030 6th St., Traverse City
Scheidler, Edw. P., Jr..............10610 Peninsula Dr.,
Traverse City
Schroeder, Dwight M.........................Northport
Skendzel, L. P...........Munson Hospital, Traverse City
Sladek, Edward F. (L)..123 E. Front St., Traverse City
Sommerness, M. Duane...........Box C, Traverse City
Sorum, F. T......................Box C, Traverse City
Spencer, John R.......1124 E. Front St., Traverse City
Steffey, Jos. C.............116 Cass St., Traverse City
Stokes, G. Edward........1100 Sixth St., Traverse City
Swartz, Fred G. (L)........612 Sixth St., Traverse City
Sweeney, Bernard J.......1100 Sixth St., Traverse City
Thacker, Fredk. R.................Front St., Frankfort
Thirlby, Richard L.......228 S. Madison, Traverse City
Wagener, Creighton A.....1100 Sixth St., Traverse City
Weih, Jack E.........1105 E. Front St., Traverse City
Weitz, Harry L...........Munson Hosp., Traverse City
Wilcox, Paul H.............333 Sixth St., Traverse City
Wiley, Philip K.............116 Cass St., Traverse City
Williams, Chas. R.........416 Sixth St., Traverse City
Willoughby, Gordon W............104 5th St., Frankfort
Wolfgram, Lavern V.........1209 E. 8th, Traverse City
Wonacott, Robert G.........107 Dexter St., Elk Rapids
Wright, J. K., Jr.......1105 E. Front St., Traverse City
Wunsch, Richard E.....1122 E. Front St., Traverse City
Young, John Harley......Children's Clinic, Traverse City
Young, Lloyd B...................Route 2, Suttons Bay
Zielke, Irwin H...........106 S. Madison, Traverse City
Zimmerman, Jos. G.......102 W. Front St., Traverse City

GRATIOT-ISABELLA-CLARE COUNTY MEDICAL SOCIETY (74)

Aldrich, Alfred L...............................Ithaca
Baker, Jerald F..........906 S. Kinney St., Mt. Pleasant
Barstow, Donald K.........215 W. Saginaw, St. Louis
Bauer, A. Robert, Jr.....412 E. Broadway, Mt. Pleasant
Becker, Myron G..............................Edmore
Bedo, Andrew V..............802 Gordon, Mt. Pleasant
Bergin, Jos. H...................112 E. Superior, Alma
Binning, Griffith............1328 N. Drive, Mt. Pleasant
Brenner, E. J. (R)........Central Mich. Comm. Hosp.,
Mt. Pleasant
Budge, Melvin J. (L)............1035 Jefferson, Ithaca
Burt, Loren G......................510 Prospect St., Alma
Chamberlain, Ray W.....608 E. Chippewa, Mt. Pleasant
Chamichian, Souren L..............Canal Rd., Mt. Pleasant
Davis, Lionel L..............314 S. Brown, Mt. Pleasant
Dunlop, Donald...............301 East Fourth St., Clare
Fishbaugh, Wm. F., Jr.............936 W. Center, Alma
Gervin, Irfan S...................231 East End St., Alma
Graham, Bernard J.............510 Prospect Ave., Alma
Haddad, T. E.........207 N. Franklin St., Mt. Pleasant
Hammerberg, Kuno................622 McEwan, Clare
Harrigan, Wm. L.......90th at School Section, Mecosta
Hedges, Frank W.............215 W. Saginaw, St. Louis
Hersee, Wm. E...........306 S. College, Mt. Pleasant
Hobbs, A. Deane (R)........Box 3233 Florence Vill.,
A Station, Winter Haven, Fla.
Howland, Walter L...........P. O. Box 633, Pinconning
Johnson, Frank D.........806 E. Bellows, Mt. Pleasant
Johnson, Philip R.....206 S. College Ave., Mt. Pleasant
Johnson, Robert B.......................R. 1, Ithaca
Juhnke, LeRoy W.........314 S. Brown St., Mt. Pleasant
Klauer, James D.......Community Hospital, Mt. Pleasant
Linn, Michael R.........Gratiot Med. Arts Bldg., Alma
Lusis, Alexsandrs....St. Home & Tr. School, Mt. Pleasant
McArthur, Stewart C..............Box 32, Rosebush
Meyer, Edwin G.................................Alma
Minster, John J.........314 S. Brown St., Mt. Pleasant
Nagler, Donald F.........308 E. May St., Mt. Pleasant
Rank, Robert K...Central Comm. Hospital, Mt. Pleasant
Ringer, Paul H., Jr.......314 S. Brown St., Mt. Pleasant
Roth, Wm. J....................303 W. Superior, Alma
Rottschaefer, John L.........3580 Northlawn Pk., Alma
Sanders, Jack F............Mich. Masonic Home, Alma
Scott, Lincoln B., Jr...........R. 3, Mt. Pleasant 48858
Silvert, Pasche P..........................Vestaburg
Smith, Dennis V. (L)......1435 Cambridge, Ann Arbor
Soriano, D. A..............218 W. High St., Mt. Pleasant
Stack, John M.....................310 Warwick Rd., Alma
Veldhuis, Andrew H.......801 Gordon Rd., Mt. Pleasant
Von Lackum, L. F...535 Prospect Blvd., Waterloo, Iowa
Waggoner, Richard L.......120 N. Center St., St. Louis
Wallman, C. Harry................901 State St., Alma
Wickert, Leo R.........1001 Watson Rd., Mt. Pleasant
Wilcox, Rex A.......................525 State Street, Alma
Wilson, Earl C..................................Harrison
Wohlfeil, Dwayne L...........10700 N.E. Sandy Blvd.,
Portland, Or. 97220
Wolfe, Kenneth P.............510 Prospect Ave., Alma
Wood, Cornelius B.....207 N. Franklin St., Mt. Pleasant
Wood, John M.......1300 S. Watson Rd., Mt. Pleasant

HILLSDALE COUNTY MEDICAL SOCIETY (78)

Bates, Morton P...Olin Health Ctr., M.S.U., East Lansing
Davis, William B...................55 Barry, Hillsdale
Day, Luther W.........Grosvener Bnk. Bldg., Jonesville
Gates, Jon H. (M)
Henelt, Edmond.................32 S. Broad, Hillsdale
Hodge, Chas. L...........................Reading

MacNeal, John A..............379 S. Broad, Hillsdale
Mattson, H. Frazyer..........32 S. Broad St., Hillsdale
Peterson, Carl A..............59 Barry St., Hillsdale
Powers, Ward O..........................Jonesville
Reigle, Frederick C.......................Litchfield
Sawyer, Walter W.........61 N. Howell St., Hillsdale
Smith, Clark B.............379 S. Broad St., Hillsdale
Stein, Arthur J...............144 Budlong St., Hillsdale
Strom, Arthur W............32 S. Broad St., Hillsdale
Tarr, John ....Camden
Trapp, Donald G..............32 Broad St., Hillsdale
Wiggins, Ira W..............................Jonesville

HOUGHTON-BARAGA-KEWEENAW COUNTY MEDICAL SOCIETY (82)

Aldrich, Addison B...........325 Harris Ave., Hancock
Aldrich, Leonard C. (R)......301 Quincy St., Hancock
Barrios, Honorato.............424 Quincy St., Hancock
Goodreau, Paul G.............301 Quincy St., Hancock
Hillmer, Raymond E. (L)....................Painsdale
Hosking, Fredk. S.........322 Calumet St., Lake Linden
anis, Anton J..................208 Quincy St., Hancock
Kolb, Fredk. E.............128 Calumet Ave., Calumet
LaBine, Alfred (L)..........Masonic Bldg., Houghton
LaCore, Ivan A.........Rice Memorial Clinic, Houghton
Lanczy, Tamas O.......Baraga County Hospital, L'Anse
Larson, Forrest W..............322 Shelden, Houghton
Lepisto, Victor E.............238 Quincy St., Hancock
Meier, Maurice D.............1033 Mine Street, Calumet
Moyer, Carl A..
Parker, Thomas M.........St. Joseph Hospital, Hancock
Repola, Kenneth L.........401 Isle Royale St., Laurim
Roche, Andrew M................221 5th St., Calumet
Rowe, Kenneth E...........107½ Calumet Ave., Calumet
Sandell, Samuel T.............210 Center St., Hancock
Sloan, Paul S...................609 Shelden, Houghton
Stroube, John A..................522 W. Third, L'Anse
Williams, Marshall S.......St. Joseph's Hospital, Hancock
Winkler, Henry J......................Box 461, L'Anse

HURON COUNTY MEDICAL SOCIETY (86)

Dixon, Ralph C........................Box 77, Pigeon
Elliott, Chas. S................................Pigeon
Ellis, Larry G...........693 S. Bay Port Rd., Bay Port
Herrington, C. Clark......117 S. Port Crescent, Bad Axe
Herrington, Chas. I. (L)......................Bad Axe
Herrington, K. B.............317 Port Crescent, Bad Axe
ones, David L.............206 Heisterman St., Bad Axe
Kube, Kenneth S.............................Bad Axe
Mullaney, J. M., Jr.......108 S. Port Crescent, Bad Axe
Oakes, Chas. W., Jr.....................Harbor Beach
Oakes, Robert W...7890 Sand Beach Rd., Harbor Beach
Scheurer, Clare A...............................Pigeon
Sidagis, Joseph..................6 W. Main St., Sebewaing
Sorenson, Maurice G..................P. O. Box, Elkton
Steinhardt, Edward E....................Box 15, Elkton
Turner, Philip R.........230 S. First St., Harbor Beach
Wible, Chas. F., Jr...........................Sebewaing
Willits, Robert A...............193 N. Main St., Elkton

INGHAM COUNTY MEDICAL SOCIETY (90)

Adams, Charles..........2909 E. Grand River, Lansing
Agate, Geo. H...........Mich. Dept. of Hlth., Lansing 4
Aiken, Donald J.......Grandview & Grand Rv., Okemos
Alexander, Reuben G.....301 Seymour Ave., Lansing 15
Allis, Harry D.........1322 E. Michigan Ave., Lansing
Altland, J. K...............Route 2, Box 178, Lansing
Asselin, David C...........1322 E. Michigan, Lansing
Badgley, Waldo O.......624 N. Capitol Avenue, Lansing
Baker, Thos. C............624 N. Capitol Ave., Lansing
Bassett, Robt. C.....1322 E. Michigan Ave., Lansing 12
Bates, Richard............2909 E. Grand River, Lansing
Bauer, Theodore I........810 Mich. Nat. Tower, Lansing
Beaubien, Mark S. (A)..........1006 Wildwood Dr.,
East Lansing
Behen, Wm. C. (L)......535 S. Capitol Ave., Lansing
Behney, Charles A. (L)........Box 4256 San Jose Rd.,
Bisbee, Arizona
Bellinger, Ernest G. (L)..........Masonic Home, Alma
Berden, Eleanor A.........2630 Libbie Drive, Lansing 17
Berge, Richard E. (A)........809 S. Marshfield Ave.,
Chicago, Il.
Bergeon, Milton C.......1021 W. Dansville Rd., Mason
Bethards, Rolland E.........Sparrow Hospital, Lansing
Bevez, Frank L.........3209 S. Cambridge Rd., Lansing
Bingham, B. Wayne........1034 E. Saginaw, Lansing 6
Black, Chas. E...............112 W. Allegan, Lansing
Black, Gertrude C. K...529 W. Grand River, Williamston
Blair, Thomas C.......1322 E. Michigan Ave., Lansing
Bleil, Eugene E.........1322 E. Michigan Ave., Lansing
Bradford, Carl W...........832 Westlawn, East Lansing
Breakey, Robt. S. (R)....520 Westmoreland, Lansing 15
Briggs, James.....................Box 68, Holt 48842
Brown, Fredk. W., Jr...831 N. Washington Ave., Lansing
Brown, Joseph C..................Box 68, Holt 48842
Brubaker, Earl W...103 N. Washington Ave., Lansing 16
Budden, M. Arthur......2909 E. Grand River, Lansing
Burge, Terry E...................Box 68, Holt 48842
Byerrum, Mr. Richard U. (A)..602 Wildwood, E. Lansing
Cairns, Donald A...............136 W. Ash St., Mason
Calomeni, Anthony D.......1850 W. Mt. Hope, Lansing
Carlson, Ralph G...........225 S. Waverly, Lansing 17
Carr, Earl I.....1915 Moore's River Dr., Lansing 48910
Caruso, Joseph A.............701 N. Logan St., Lansing
Casey, Byron L.............202 M. A. C., East Lansing
Chaskes, Marian I. G.......210 E. Hillsdale St., Lansing
Cheney, Wm. D.........Sparrow Hosp. X Ray, Lansing
Chi, Seong H. (A)....Ingham Medical Hosp., Lansing
Cipparone, Joseph R.......St. Lawrence Hosp., Lansing
Clark, Gaius D.........Oldsmobile Div., GMC, Lansing
Clark, Melvin..........4558 Marlborough Rd., Okemos
Clark, Wm. E..................131 E. Oak St., Mason
Clinton, Geo. R.........................R. 2, Mason
Clore, Forrest C. (M)
Combs, Robt. G.......1023 E. Michigan Ave., Lansing 12
Comstock, Howard C...2909 E. Grand River, Lansing 12
Cook, J. Maxwell.............3911 W. Michigan, Lansing
Cope, Henry E. (R)........605 Westmoreland, Lansing
Cordes, Jerome F.........2909 E. Grand River, Lansing
Corneliuson, G. B................c/o Stanley Corneliuson,
Hooper Lake Road, Ishpeming
Cowan, John A.............825 Touraine, East Lansing
Crow, Harold E.....2909 E. Grand River Ave., Lansing
Cummings, Geo. D.....Mich. Dept. of Hlth., Lansing 4
Dale, Edward C.....Health Service, MSU, East Lansing
Darling, Lewis H.....115 W. Hillsdale St., Lansing 15
Davis, Don G...............701 N. Logan St., Lansing
Dawe, C. D...........1515 W. Mt. Hope Ave., Lansing
DeVries, Corydon F. (L)....320 Townsend St., Lansing
Dexter, M. J.....................229 E. Maple, Mason
Dorner, Kenneth R.........2909 E. Grand River, Lansing
Drolett, Alfred J. (L)..1018 Prudden Bldg., Lansing 16
Drolett, Donald J.......1322 E. Michigan Ave., Lansing
Drolett, Lawrence A.....1036 Morris Ave., Lansing 48917
Dunkel, John F.......Edw. W. Sparrow Hosp., Lansing
Dunn, Forest M.........1322 E. Michigan Ave., Lansing
Ellis, Bertha W. (R)..P.O. Box 2327, Hollywood, Florida
Ellis, C. Ward (L)..P.O. Box 2327, Hollywood, Florida
Ellison, Alfred, Jr.....2909 E. Grand River 202, Lansing
Evans, Matthies............1877 Walnut, East Lansing
Feeney, Kenneth J...1908 Mich. Natl. Tower, Lansing 15
Feurig, James S...........321 Kensington, East Lansing
Flory, Clyde R., Jr.............201 W. Hillside, Lansing
Folkers, Leonard M...234 Michigan Ave., East Lansing
Fortino, Silvio P.........2909 E. Grand River, Lansing
Fryer, Douglas H.......Mich. Dept. of Hlth., Lansing 4
Gage, David P.........Voca. Rehab., Box 1016, Lansing
Garlinghouse, A. John, Jr.......1322 E. Michigan Ave.,
Lansing

Gellar, Abraham............108 Division, East Lansing
George, Harry C.........335 Seymour St., Lansing 33
Ghannam, Rasem........2909 E. Grand River, Lansing
Ginnebaugh, L. A. (A)..V.A. Hospital 82 2, Battle Creek
Goldner, Roy E.....1318 S. Washington Ave., Lansing 10
Govons, Sidney R.......1322 E. Michigan Ave., Lansing
Grey, Anna B. (L)..915 Cajon St., Redlands, California
Hames, R. E...........1322 E. Michigan Ave., Lansing
Hanna, Roger J...............117 E. Maple St., Mason
Harrington, Louis E.....3526 W. Saginaw St., Lansing 17
Harris, Herbert W...609 N. Washington Ave., Lansing 15
Harrison, Wm. H.....834 W. St. Joseph St., Lansing 15
Harrold, Jesse F.............326 W. Ionia, Lansing 33
Hatton, R. L...............4462 Greenwood St., Okemos
Hay, Kent R...........1322 E. Michigan Ave., Lansing
Hayes, Robt. E.......1322 E. Michigan Ave., Lansing 12
Hayford, Wm. D.........1028 E. Saginaw St., Lansing
Heald, Gordon H.......714 Abbott Road, East Lansing
Heckert, Frank B...1105 Bnk. of Lnsg. Bldg., Lansing 16
Heckert, Jos. K. (L)..1105 Bnk. of Lnsg. Bldg., Lansing
Heerdt, Mark E.............810 W. Saginaw, Lansing
Henderson, Norman D.....726 Abbott Rd., East Lansing
Hermes, Edgar J.........1701 Ravenswood Dr., Lansing
Heustis, Albert E...........Mich. Dept. Health, Lansing
Himmelberger, R. J.........3624 Colchester, Lansing 6
Hiscoe, D. Bonta........2909 E. Grand River, Lansing
Hoffer, W. E. (L)........331 Shepard Street, Lansing
Hogg, Raymond E.......2909 E. Grand River, Lansing
Holland, Chas. F.............810 W. Saginaw, Lansing
Horvath, Francis......MSU Health Center, E. Lansing
Howe, Gertrude E.............3500 N. Logan, Lansing
Howie, Charles (M)......1546 B. Cedar, Fort Dix, N.J.
Hoyt, John C.....................Box 66, Holt 48842
Huggett, Clare C.......122 W. Gd. River Ave., Lansing
Hunt, Andrew D., Jr.......Coll. of Human Med., MSU, E. Lansing
Hurth, M. S.................1717 Jerome St., Lansing
Imeson, Elizabeth W. (A)..........1809 Cahill Drive, East Lansing
Isbister, J. L.........Dept. Health, DeWitt Rd., Lansing
Iung, Omero S...................411 Bartlett, Lansing
Jacob, S. Sprigg, III..........201 Ann St., East Lansing
Jarstfer, Bruce S. (M)......U.S.A., Tripler Gen. Hosp., Honolulu, Hawaii
Johnson, David B.........2909 E. Grand River, Lansing
Johnson, Henry T. (N)............3501 W. VanBuren, Phoenix, Arizona
Johnson, Kenneth H. (L) 1116 Mich. Nat. Tower, Lansing
Johnson, Richard..........2909 E. Grand River, Lansing
Jones, Francis A., Jr. (R)..........815 Royal Palm Pl., Vero Beach, Florida
Jones, Martin F...........2909 E. Grand River, Lansing
June, Robt. C.............209 N. Walnut, Lansing 33
Kahn, David.............2909 E. Grand River, Lansing
Kalmbach, Roland E.....1322 E. Michigan Ave., Lansing
Katlein, Stanley (A)......St. Lawrence Hosp., Lansing
Kellerman, Howard H.........1322 E. Michigan Ave., Lansing 12
Kelly, William...................Cass Bldg., Lansing
Kent, A. Edith Hall................Box 1167, Lansing
Kent, Herbert K...........M. O. Box 1167, Lansing 13
Kenyon, Fanny H. (L)..624 LaSalle Blvd., Lansing 12
Kimmich, R. A.......1017 Lantern Hill Dr., East Lansing
Kinzel, Raymond C...........326 W. Ionia St., Lansing
Klunzinger, W. R.........326 W. Ionia St., Lansing 33
Knisely, Wm. H. (A)..731 Oakwood Drive, E. Lansing
Kovich, Eleanore......MSU Health Center, East Lansing
Kozak, Jerome S.......609 N. Washington Ave., Lansing
Kraft, Lester C.................209 S. Main St., Leslie
Landick, Robt. E., Jr.........810 W. Saginaw, Lansing
Lange, Philip F.....2025 W. Holmes Rd., Lansing 48910
Lanting, Helen E. P.......600 Lesher Place, Lansing 15
Larkey, Paul E...........110 N. Rosemary St., Lansing
Larson, Homer I.....1322 E. Michigan Ave., Lansing 12
Lauzun, Virginia D...1654 E. Grand River, East Lansing
LeDuc, Don M.........1322 E. Michigan Ave., Lansing
Leshoek, Jos. C.............701 N. Logan St., Lansing
Levett, Harry L.......2909 E. Grand River Ave., Lansing
Lewis, Clayton, Jr.......2909 E. Grand River, Lansing
Linnell, Paul C.................701 N. Logan, Lansing
Llinas, Jose J...........Ingham Med. Hospital, Lansing
Long, Chas. O., Jr.......2909 E. Grand River, Lansing
Loree, Maurice C.......120 W. Hillsdale St., Lansing 15
Loughrin, T. D..........1005 Abbott Rd., East Lansing
Lovoll, Kaare..............209 N. Walnut St., Lansing
Lucas, Thos. A.............1515 W. Mt. Hope, Lansing
Ludlum, Lewis C.......1126 W. Saginaw St., Lansing 15
Malcolm, Henry E...1005 Abbott Rd., East Lansing 48823
Maldonado, W. E..........Sparrow Hospital, Lansing
Mannausa, L. R...1005 Abbott Rd., East Lansing 48823
Marta, John B.......1720 Anderson Way, East Lansing
Martin, Wayne O.............4765 Nakoma D.r, Okemos
Marzolf, M. Finette (N)........3315 Wisconsin N.W., Washington 16, D. C.
Mavromatis, E.........1322 E. Michigan Ave., Lansing
Mavromatis, F.........1322 E. Michigan Ave., Lansing
May, Stephen G.......202 M. A. C. Avenue, E. Lansing
McCorvie, C. Ray (L).......1410 Old Canton Lane, East Lansing
McCorvie, Donald R.........Williamston Med. Bldg., Williamston
McElmurry, Leland R.....209 N. Walnut St., Lansing 15
McFarlane, Donald R...1322 E. Michigan Ave., Lansing 12
McGillicuddy O. B. (L)......1816 Mich. Natl. Tower, Lansing
McGillicuddy, R. J...........701 N. Logan, Suite 315, Lansing 48915
McKenney, Marvin J.....1322 E. Michigan Ave., Lansing
Meade, Wm. H.............1023 E. Michigan, Lansing
Meinke, Richard K.....1322 E. Michigan Ave., Lansing
Melick, Richard C...........326 W. Ionia, Lansing 33
Mercer, Walter E. (R)....909 Glenhaven, East Lansing
Messenger, A. L.......1322 E. Michigan Ave., Lansing
Miller, J. Thomas (M)....LCDR MC USNR MOQ 3054, Camp LeJeune, N.C. 28542
Miller, Willard J...........930 N. Washington, Lansing
Mirkil, V. Jerome..........5218 S. Cedar St., Lansing
Molina Pung, Elba......1512 E. Michigan Ave., Lansing
Monfort, Robert N...........300 Pacific Rd., Miami, Fla.
Moore, Charles R.......1322 E. Michigan Ave., Lansing
Moore, Donald B.....1322 E. Michigan Ave., Lansing 12
Morrow, Robt. J. (R)........3117 Revere Pl., Lansing
Nakfoor, Eugene C.........701 N. Logan St., Lansing
Neering, James C.....1322 E. Michigan Ave., Lansing 12
Neuman, John R.......3911 W. Michigan Ave., Lansing
Newitt, A. W. (L).......119 W. Washtenaw, Lansing
Nicholas, Mildred V.....5596 Portage Lake Rd., Dexter
Niland, Paul T.......1322 E. Michigan Ave., Lansing 12
Ochsner, Paul J...........Fisher Body Corp., Lansing 4
Ojeda, Pedro..................701 N. Logan, Lansing
Packer, John H...........2909 E. Grand River, Lansing
Paine, Wm. G...............1028 E. Saginaw, Lansing
Palmer, R. E. (L).............1627 Wildwood Rd., Clearwater, Fl. 33516
Park, Joon H.................1801 Hosler, Flint 48503
Parker, Earl E.................207 E. Bellevue, Leslie
Payne, Thomas C.....2909 E. Grand River Ave., Lansing
Peal, James A...............Lewis Cass Bldg., Lansing
Peets, Ronald..........Gr. River & Grandview, Okemos
Philips, David P. (R)........1217 Loraine, Lansing 10
Plant, John F.............2909 E. Grand River, Lansing
Plesscher, Wm. H.......1322 E. Michigan Ave., Lansing
Pomeroy, Richard W.....1322 E. Michigan Ave., Lansing
Powell, Gerald D.....930 N. Washington, Lansing 48906
Reid, Harold E.........359 University Dr., E. Lansing
Reizen, Maurice S...........119 W. Washtenaw, Lansing
Reynolds, Edward E.........Rt. 2, Box 1B, Williamston
Rice, R. G...............252 Hollister Bldg., Lansing
Richards, Frank D.....1322 E. Michigan Ave., Lansing
Richardson, M. L. (L)......410 Albert, East Lansing
Robinson, Thomas H.............P.O. Box 204, Lansing
Robson, Edmund J.......215 N. Walnut St., Lansing 15
Rogers, J. Speed......1322 E. Michigan Ave., Lansing
Rollstin, Robt. A.......1014 Townsend St., Lansing 21
Ruhmkorff, Ralph H...MSU Health Center, East Lansing
Rutledge, Saml. H.....1322 E. Michigan Ave., Lansing 12
Saenz, Hugo R.............1515 W. Mt. Hope, Lansing
Saker, James H...........201 W. Hillsdale St., Lansing
Sander, John F.............4780 Okemos Rd., Okemos
Sawvell, Austin R.........810 W. Saginaw St., Lansing
Scallin, J. F.................810 W. Saginaw, Lansing
Schaffer, Carole S. (A)..846 Audubon Rd., East Lansing

Scheidt, R. Rudolph..........201 W. Hillsdale, Lansing
Schmidt, Harry J.........2909 E. Grand River, Lansing
Schultz, Arthur E...........4646 Ottawa Dr., Okemos
Seger, Fred L. (L)............1035 Cherry St. N. E., St. Petersburg 4, Fla.
Shapiro, Hyman D.....1327 E. Michigan Ave., Lansing
Sharp, Máhlon S.............521 N. Capitol, Lansing
Shaw, Milton............320 Townsend St., Lansing 15
Sheets, Joseph L...........521 N. Capitol Ave., Lansing
Sherman, Geo. A.........112 W. Hillsdale, Lansing 15
Sichler, Harper G. (R)..1476 Stonegate Lane, E. Lansing
Siegel, David............2909 E. Grand River, Lansing
Silverman, Irving E.......2909 E. Grand River, Lansing
Sleight, Justin L..........2909 E. Grand River, Lansing
Smith, Anthony V...........116 W. Sycamore, Mason
Smookler, Bernard H.....2909 E. Grand River, Lansing
Snyder, LeMoyne............P.O. Box S, Paradise, Calif.
Snyder, Ruth C. E...234 W. Michigan Ave., East Lansing
Spagnuolo, Alfred J..........1418 S. Logan St., Lansing
Spencer, J. Clyde............Sparrow Hospital, Lansing
Spencer, Perry C.........320 Townsend St., Lansing 15
Stanley, Arthur L...........401 W. Greenlawn, Lansing
Stehman, Vernon A.........Lewis Cass Bldg., Lansing
Steinem, David L.....Lansing Mental Htl. Ctr., Lansing
Steiner, Abraham A. (R)........Route 3, Grand Ledge
Stephan, Winton E.....1322 E. Michigan Ave., Lansing
Stilwill, Geo. D...........2909 E. Grand River, Lansing
Stimson, Paul R.......119 E. Grand River, East Lansing
Stone, Benj. J. (A)................736 Rosewood Ave., E. Lansing 48823
Stow, Robt. M...........2909 E. Grand River, Lansing
Strempek, Walter F.....726 Whitehills Dr., East Lansing
Stringer, C. J. (R)........425 Walbridge, East Lansing
Sundell, Edwin C.......1322 E. Michigan Ave., Lansing
Swartz, Fredk. C...........720 Seymour Street, Lansing
Tamblyn, Fredk. W.......335 Seymour Ave., Lansing 33
Thaden, D. W.......208 M. A. C. Avenue, East Lansing
Thimmig, Robt. F.....1322 E. Michigan Ave., Lansing 12
Tien, Hsin Chen........701 N. Logan St., Lansing 48915
Trager, Fredk. C.....1322 E. Michigan Ave., Lansing 12
Trescott, Robt. F.......1322 E. Michigan Ave., Lansing
Trimby, Robt. H.......1322 E. Michigan Ave., Lansing
Troost, Franklin L.............4378 W. Delhi Rd., Holt
Urban, Eva................540 Glenmoor, East Lansing
Vanderzalm, T. P. (L)....1452 Cambridge Rd., Lansing
Varner, Carol..........Okemos Medical Bldg., Okemos
Velten, Hubert P........202 M. A. C. Ave., East Lansing
Venier, Jos. H.....1628 Hitching Post Rd., East Lansing
Wadley, Ralph..........335 Seymour Ave., Lansing 33
Wainright, James W.......720 Seymour Street, Lansing
Walker, Leo W.........4225 Apple Tree Lane, Lansing
Wellman, John M.......1322 E. Michigan Ave., Lansing
West, Chas. Carl........2909 E. Grand River, Lansing
Wiegenstein, John G.....2025 W. Holmes Rd., Lansing
Wilcox, K. R., Jr.........Mich Dept. of Health, Lansing
Wilensky, Thos..............701 N. Logan St., Lansing
Willson, Howard S.....704 Mich. Nat. Tower, Lansing 8
Worthington, Ralph........810 W. Saginaw, Lansing 15
Wortley, Chas. K.....1017 E. Grand River, E. Lansing
Zick, Gerald A.......1322 E. Michigan Ave., Lansing 12
Ziel, Hermann A., Jr.....Mich. Dept. of Health, Lansing

IONIA-MONTCALM COUNTY MEDICAL SOCIETY (94)

Anderson, D. Hess..............207 Bridge St., Portland
Bautista, Leandre I.........203 First Security Bk., Ionia
Bennett, W. Bruce........Lakeview Hospital, Lakeview
Bird, Wm. L...............917 W. Oak St., Greenville
Birzgalis, Alfreds A..........Ionia State Hosp., Ionia
Buck, Jack H.....................517 Division, Ionia
Bunce, Leo W...........................Trufant
Campbell, Richard E..............106 N. Depot, Ionia
Dunkin, Lloyd S.............410 S. Clay St., Greenville
Foust, Jos. C. (A)..............Kisa Box 73 Tukuku, Tanganyika, E. Africa
Geib, Oscar P. (L)..........................Gaylord
Hansen, Carl M.............................Stanton
Haskell, Robt. H. (L)........Zetlands Estate T.W.R., Nevis, Leeward Isl., B.W.I.
House, Glenn W., Jr.......1200 W. Oak St., Greenville
Kazmers, Nikolas.........................Lakeview
Kopchik, Jos...................................Muir
Kozachik, Martin J.............123 Bridge St., Portland
Leach, Russell E.............Ionia State Hospital, Ionia
Lilly, Isaac S. (L)..........................Stanton
Marston, Leo L.....................Box 235, Lakeview
Merchun, Frank A...11804 W. Carson City Rd., Greenville
Mitchell, Harold C. (R)............Box 3175 Nalcrest, East Lake Wales, Fla.
Naglins, Jekabs...............Ionia State Hosp., Ionia
Olsen, Bruce C.............917 W. Oak St., Greenville
O'Malley, R. J.................310 N. Main St., Ionia
Rice, Robt. E.................P. O. Box 271, Greenville
Robertson, Perry C. (L)..........327 Center St., Ionia
Slagh, Milton E................................Saranac
Smith, Robt. O......................111 N. Kidd St., Ionia
Socha, Edmund S.................217 E. Main, Ionia
Stevens, Charles E.......513 N. Lafayette St., Greenville
Tannheimer, John F...........525 Lafayette St., Ionia
Younis, Ahmad..........505 S. Lafayette St., Greenville

JACKSON COUNTY MEDICAL SOCIETY (98)

Adams, Ellis W.............720 W. Franklin, Jackson
Ahronheim, J. H.........Foote Memorial Hosp., Jackson
Allen, Duane M..........Hanover Medical Ctr., Hanover
Appel, Saul............112 W. Michigan Ave., Jackson
Baker, Geo. M......................350 S. Union, Parma
Beckwith, Sidney A.........100 E. Main St., Stockbridge
Bentley, Jack P.........2532 Spring Arbor Rd., Jackson
Bentley, Mary E. N.....2532 Spring Arbor Rd., Jackson
Brashares, Zane A.............................Brooklyn
Bullen, G. R. (L)................418 Third St., Jackson
Buslepp, Robert C.........901 Reynolds Bldg., Jackson
Clarke, Corwin S. (L)..............Hacinda Carmel, Carmel, California
Cooley, Chas. W.................Mercy Hosp., Jackson
Cooley, Randall M. (L)....141 E. Robinson St., Jackson
Corley, Cecil (L)..........204 Homecrest Rd., Jackson
Corley, Ennis H...........1401 Reynolds Bldg., Jackson
Corley, Robt. W...........204 Homecrest Rd., Jackson
Cox, Ferdinand (L)...............1601 4th St., Jackson
Culver, Raymond E.........435 Wildwood Ave., Jackson
Daly, Byrne M...............297 W. Michigan, Jackson
Davenport, Bruce................612 First St., Jackson
DeMay, Cuthbert E. (L)..403 E. Michigan Ave., Jackson
DeMay, John D..........403 E. Michigan Ave., Jackson
Deming, Richard C...........724 W. Franklin, Jackson
Douglas, Edward W. (L)......1920 Fourth St., Jackson
Filip, Hypolit K.................P.O. Box 84, Jackson
Finton, Robt. E.............610 W. Michigan, Jackson
Greenbaum, Harry......1203 Greenwood Ave., Jackson
Growt, Bowers H. (L)..............................Addison
Habenicht, Hilda A...........545 Lansing Ave., Jackson
Hackett, Thos L.............519 N. East Ave., Jackson
Hardie, Geo. C...............724 W. Michigan, Jackson
Hicks, Glenn C. (L)....1009 Wildwood Avenue, Jackson
Holst, John B..............606 City Bank Bldg., Jackson
Huldin, Donald H.......610 W. Michigan Ave., Jackson
Jennings, Larry E.......766 W. Michigan Ave., Jackson
Joerin, Wm. A..............720 W. Franklin St., Jackson
Karr, Jean P..............502 W. Michigan Ave., Jackson
Keefer, Albert H...............................Concord
Kempton, Geo. B.......762 W. Michigan, Jackson 49201
Kiessling, A. J., Jr.............511 S. West Ave., Jackson
Kobs, Robt. J..............720 W. Franklin St., Jackson
Kopp, Clemens M......... 205 N. East Avenue, Jackson
Kudner, Donald F.......766 W. Michigan Ave., Jackson
Lake, Edward C...........720 W. Franklin St., Jackson
Landron, Danl............4633 Page, Michigan Center
Latchaw, William R...........4000 Cooper St., Jackson
Lenz, Chas. R., Jr..................405 1st St., Jackson
Lewis, Elmore F. (L)......1112 Carlton Blvd., Jackson
LeZotte, Lloyd A..................4000 Cooper, Jackson
Linden, Victor E..............2025 Fourth St., Jackson
Maas, Gerald I.............1615 Carlton Blvd., Jackson
MacLean, Lloyd R...........710 S. Brown St., Jackson

McGarvey, Wm. E. (L)..161 W. Michigan Ave., Jackson
McLaughlin, John M.........710 S. Brown St., Jackson
McLaughlin, Miar J. (L)....710 S. Brown St., Jackson
McLauthlin, H. B.........439 Wildwood Ave., Jackson
McQuillan, F. P...............611 Center St., Jackson
Meads, Jason B. (L)....161 W. Michigan Ave., Jackson
Medlar, Robt. E...........719 Seventeenth St., Jackson
Morelli, Lorenzo..........401 W. Prospect St., Jackson
Muhich, Ralph A.......2532 Spring Arbor Rd., Jackson
Munro, Colin D. (L)..........3849 Guest Rd., Jackson
Munro, Nathan D.......740 W. Michigan Ave., Jackson
Murphy, Bernard M.........1134 E. Ganson St., Jackson
Newton, Ray E. (L)....180 W. Michigan Ave., Jackson
Nichols, Don H. (M)......703 S. Webster St., Jackson
Niekamp, Harold.........2532 Spring Arbor Rd., Jackson
Oleksy, Stanley P..............744 W. Michigan, Jackson
Olsen, Lloyd L.........610 W. Michigan Ave., Jackson
Oster, Harold L.........1218 Greenwood Ave., Jackson
Otis, Grant L.............525 Wildwood Ave., Jackson
Parker, John C...........610 N. West Avenue, Jackson
Payne, Andrew K.........Foote Memorial Hosp., Jackson
Phillips, Geo. H.......Jackson Co. T. B. Sanat., Jackson
Pray, Frank F. (L)..6533 Woodward Lake Rd., Fenwick
Pray, Geo. R. (L)..........404 S. Jackson St. Jackson
Preston, Joseph A.............Mercy Hospital, Jackson
Rice, John W..................421 McNeal St., Jackson
Ries, Richard G...........720 W. Franklin St., Jackson
Riley, Philip A. (L)........500 S. Jackson St., Jackson
Riley, Philip A., Jr...........500 S. Jackson St., Jackson
Rodriquez, Leopoldo......720 W. Franklin St., Jackson
Rua, Ignacio..................1810 W. High, Jackson
Rucker, Joseph................1012 Francis St., Jackson
Sargent, Leland E.......Foote Memorial Hosp., Jackson
Sautter, Wm. A...............................Horton
Schmidt, Theophile E. (L)....180 W. Michigan Ave., Jackson
Schneider, R. H...............724 W. Franklin, Jackson
Schrader, Frank J.......755 W. Michigan Ave., Jackson
Scott, John A., Jr..............432 W. Michigan, Jackson
Shaeffer, Leland D.........1615 Carlton Blvd., Jackson
Sher, David B. (R)............3800 Kirkwood, Jackson
Sill, Henry W...........724 W. Michigan Ave., Jackson
Sirhal, Alfred M..........................Brooklyn
Smith, Dean W.........500 W. Michigan Ave., Jackson
Southwick, W. A...........130 Maple Street, Springport
Stackable, Wm. R.......2532 Spring Arbor Rd., Jackson
Stewart, Leslie L., Jr...........1919 Kibby Rd., Jackson
Stolberg, Carl A...............724 W. Franklin, Jackson
Stone, Ethon L..............721 Seventeenth St., Jackson
Sugar, Saml..............180 W. Michigan Ave., Jackson
Tate, Cecil E..........2400 W. Michigan Ave., Jackson
Taylor, Capt. Lee E. (M)........7481 A Darnall St., El Paso, Texas
Taylor, Ross V.............517 Wildwood Ave., Jackson
Thalner, Leonard F. (L)..609 W. Michigan Ave., Jackson
Thayer, Earl A. (L)....120 W. Michigan Ave., Jackson
Thompson, T. B............434 Wildwood Ave., Jackson
Townsend, James W. (L)............108 Hague Ave., Vandercook Lake, Jackson
VanSchoick, Frank........2100 4th St., Jackson 49203
VanSchoick, R. M.........1731 Thornwood Rd., Jackson
VanWagnen, F. I...........434 Wildwood Ave., Jackson
Vivirski, Edward E...........603 S. Elm Ave., Jackson
Weddon, Edward R...........R. F. D. 2, Stockbridge
Wholihan, John W.......604 W. Michigan Ave., Jackson
Wickham, Woodward A...........2029 Fourth, Jackson
Wille, Warren S.........5325 Brown Lake Rd., Jackson

KALAZAMOO ACADEMY OF MEDICINE (102)

Aach, Hugo A................3623 Duke St., Kalamazoo
Ajemian, Edward P.........252 E. Lovell St., Kalamazoo
Alexander, C. A...........118 W. North St., Kalamazoo
Andrews, Sherman E.....224 E. Cedar St., Kalamazoo 8
Andrews, Thomas E.........224 E. Cedar St., Kalamazoo
Angell, Howard H. (A)....Upjohn Company, Kalamazoo
Anglin, Walter M......7211 Lantollarrey Rd., Kalamazoo
Appel, Ben A.............252 E. Lovell St., Kalamazoo
Appel, William..........252 E. Lovell St., Kalamazoo 8
Appell, Lloyd E.......126 N. Kalamazoo Ave., Vicksburg
Armstrong, Robt. J.....103 N. Burdick St., Kalamazoo 1
Aydogan, Enver..............141 S. Rose St., Kalamazoo
Banner, Lawrence R...Kalamazoo State Hosp., Kalamazoo
Barrows, Winona M.........1500 Blakslee St., Kalamazoo
Barry, Manley L.............Plainwell Sanit., Plainwell
Bateman, William T.........914 S. Burdick, Kalamazoo
Bennett, Keith F...........252 E. Lovell St., Kalamazoo
Benson, H. Curtis....217 Bronson Med. Ctr., Kalamazoo
Berglund, Thomas R.......6646 Portage Rd., Kalamazoo
Berglund, V. A.............6646 Portage Rd., Kalamazoo
Berry, Ivor, Jr.............516 Whites Rd., Kalamazoo
Betz, Eldean G.............1711 Merrill, Kalamazoo 6
Birch, Wm. G...........252 E. Lovell St., Kalamazoo 5
Bodmer, Harvey C...403 W. Kalamazoo Ave., Kalamazoo
Bower, Richard J.........6646 Portage Rd., Kalamazoo
Breneman, James C.............25 Pearl St., Galesburg
Brown, Irmel W. (L)..107 W. Michigan Ave., Kalamazoo
Brue, Peter P...........1009 Cambridge Dr., Kalamazoo
Burdick, Harry W.........1219 S. Park St., Kalamazoo
Burrell, Robt. B.............1711 Merrill St., Kalamazoo
Butler, Wm. J................1631 Gull Rd., Kalamazoo
Callander, C. Glen.........252 E. Lovell St., Kalamazoo
Carter, E. R................1324 S. Park St., Kalamazoo
Cartland, Geo. F. (A)......1704 Dover Rd., Kalamazoo
Cashen, Russell M.........252 E. Lovell St., Kalamazoo
Chodos, Dale D. J. (A)....Upjohn Company, Kalamazoo
Chrest, Clarence P.........458 W. South St., Kalamazoo
Christian, Daniel K........252 E. Lovell St., Kalamazoo
Clement, F. L.......502 Bronson Med. Cen., Kalamazoo
Conrad, Maynard M.........252 E. Lovell St., Kalamazoo
Cooper, Paul F............252 E. Lovell St., Kalamazoo
Cornish, F. L., III..........1631 Gull Rd., Kalamazoo
Cox, Franklin..............Borgess Hospital, Kalamazoo
Crawford, Kenneth L...........612 Douglas, Kalamazoo
Crawley, Kenneth R. (A)..Upjohn Company, Kalamazoo
Creager, Ray O.........1218 Bronson Circle, Kalamazoo
Cretsinger, Francis C.......224 E. Cedar St., Kalamazoo
Croasdale, R. E...........252 E. Lovell St., Kalamazoo
Curran, Cyril J.............Borgess Hospital, Kalamazoo
Currier, Richard K.........6646 Portage Rd., Kalamazoo
Dahlstrom, Doris E...723 S. Westnedge Ave., Kalamazoo
Damiano, Robert E.........Upjohn Company, Kalamazoo
Dana, Robt. L...............1631 Gull Rd., Kalamazoo
Decker, Wm. A...............1207 Oakland, Kalamazoo
DeHaan, Raymond M. (A) Upjohn Company, Kalamazoo
Delbert, Stewart G.......914 S. Burdick St., Kalamazoo
DeLong, Robt. E.............1634 Gull Rd., Kalamazoo
DePree, Harold E.........252 E. Lovell St., Kalamazoo
Derrick, C. Warren....Western Mich. Univ., Kalamazoo
DeVries, John M...........516 Whites Rd., Kalamazoo
Dew, Robt. R.............1711 Merrill St., Kalamazoo
DeWitt, Norman L. (R).......5131 M 43, Box 77A, Hickory Corners, Mich.
Dick, Leo A...............611 Howard St., Kalamazoo
Doezema, Edward R.......516 Whites Rd., Kalamazoo
Dowd, Bennard J.............1700 Gull Rd., Kalamazoo
Doyle, Fredk. M.............611 Howard St., Kalamazoo
Dugger, James A.....2901 S. Westnedge Ave., Kalamazoo
Fath, August F................1711 Merrill, Kalamazoo
Ferguson, Robt. K.........1141 S. Rose St., Kalamazoo
Finton, Max A.............252 E. Lovell St., Kalamazoo
Fitzsimmons, F. J.........GMC Div., 5200 E. Cork St., Kalamazoo
Flunt, Roman....Box A, Kalamazoo St. Hos., Kalamazoo
Fopeano, John V...........1711 Merrill St., Kalamazoo
Fosmoe, Robert J...........458 W. South St., Kalamazoo
Fry, J. William............1821 Whites Rd., Kalamazoo
Fuller, Paul M...............1700 Gull Rd., Kalamazoo
Gardner, Carl A...........1141 S. Rose St., Kalamazoo
Geis, Arthur F.............1223 S. Park St., Kalamazoo
Gerard, Earl S. (A)....3410 Runnymede Dr., Kalamazoo
Gerstner, Richard M...212 Bronson Med. Ctr., Kalamazoo
Gibson, Richard E..........................Schoolcraft
Gladstone, Wm. S.........458 W. South St., Kalamazoo
Glaser, Danl. F............463 Academy St., Kalamazoo
Goodhue, Lolita G. (L)....2503 W. Main St., Kalamazoo

Gove, Robert S................1631 Gull Rd., Kalamazoo
Grabowski, Walter........Bx. A, Kalamazoo St. Hosp.,
Kalamazoo
Graf, Michael................1631 Gull Rd., Kalamazoo
Grekin, Robt. H.......417 Forest St., Kalamazoo 49001
Gremel, Norman..........458 W. South St., Kalamazoo
Grunwaldt, Edgar........2336 Bronson Blvd, Kalamazoo
Haddock, D. A., Jr.........6646 Portage St., Kalamazoo
Hagans, James A..........Upjohn Company, Kalamazoo
Hailman, Harold F...P.O. Box 430, Yonkers, New York
Hammer, John M.............100 Maple St., Parchment
Hanson, Curtis M.........252 E. Lovell St., Kalamazoo
Hare, J. Donald ....516 Whites Road, Kalamazoo
Harrell, Frank G.............1602 Gull Rd., Kalamazoo
Harrelson, Wm. D.............1324 S. Park, Kalamazoo
Hayner, Russell A.............4015 Portage, Kalamazoo
Heersma, H. Sidney........1711 Merrill St., Kalamazoo
Heinle, Robt. W.....Med. Div., Upjohn Co., Kalamazoo
Hendrix, J. W.................515 Fineview, Kalamazoo
Herbert, Walter N.........1223 S. Park St., Kalamazoo
Hersey, E. Freeman......1215 Oakland Drive, Kalamazoo
Hersey, Margaret S.........1215 Oakland Dr., Kalamazoo
Hildreth, Roscoe C.......458 W. South St., Kalamazoo 46
Hodgman, Albert B.........612 Douglas Ave., Kalamazoo
Hodgman, Richard W.......612 Douglas Ave., Kalamazoo
Hoekstra, George J...........100 Maple St., Parchment
Howard, Willard H...........1536 Gull Rd., Kalamazoo
Hubbard, Edwin M.........252 E. Lovell St., Kalamazoo
Hume, Robt. H.............1711 Merrill St., Kalamazoo
Hunt, Jack...................1631 Gull Rd., Kalamazoo
Huyser, Wm. C. (L)......427 S. Burdick St., Kalamazoo
Irwin, Wm. D...........103 N. Burdick St., Kalamazoo
Janke, Robert A.........1821 Whites Dr. W., Kalamazoo
Jennings, Robt. M...Box A, Kala. State Hosp., Kalamazoo
Johnson, Fenimore T. (A)......Med. Div., Upjohn Co.,
Kalamazoo
Kadrnka, Frank O. (A)....Upjohn Company, Kalamazoo
Kapik, Armand..............1521 Gull Rd., Kalamazoo
Kavanaugh, John............1631 Gull Rd., Kalamazoo
Kavanaugh, T. E.............1631 Gull Rd., Kalamazoo
Kavanaugh, Wm. R.......612 Douglas Ave., Kalamazoo
Keep, Pliny M...............1521 Gull Rd., Kalamazoo
Kettunen, Robert C.......252 E. Lovell St., Kalamazoo
Kihm, John L.............1219 S. Park St., Kalamazoo
Kilgore, Robt. N...........252 E. Lovell St., Kalamazoo
Kincaid, Joseph E.......1634 Gull Rd., Kalamazoo 49001
Klerk, Wm. J............914 S. Burdick St., Kalamazoo
Koestner, Paul A...........1303 Portage St., Kalamazoo
Lawrence, James O.....1409 Henderson Dr., Kalamazoo
Lawson, James B. (A)......R.R. 1, Box 190, Vicksburg
Lemmer, Richard A.......252 E. Lovell St., Kalamazoo
Light, Richard U...916 American Nat. Bldg., Kalamazoo
Littig, John D.............1324 S. Park St., Kalamazoo
Littlejohn, P. M.........5111 Woodmont Dr., Kalamazoo
Locklin, W. Kaye...........1141 S. Rose, Kalamazoo
Louisell, James M.........611 Whitcomb St., Kalamazoo
Lowe, W. Garter..........252 E. Lovell St., Kalamazoo
Loynd, James W., II.......1141 S. Rose St., Kalamazoo
Lubavs, Konrads V.............420 John St., Kalamazoo
MacDonald, M. A..........252 E. Lovell St., Kalamazoo
Machin, Harold A.............420 John St., Kalamazoo
MacVicar, James E.........252 E. Lovell St., Kalamazoo
Malone, James G...............420 John St., Kalamazoo
Margolis, Fredk. J.......2901 S. Westnedge, Kalamazoo
Marshall, Don.........301 Bronson Med. Ctr., Kalamazoo
Marshall, Wm. P.......705 Hanselman Bldg., Kalamazoo
Martens, Irvin J.............1521 Gull Rd., Kalamazoo
May, Donald G.........1634 Gull Rd., Kalamazoo 49001
McCarthy, James H...........100 Maple St., Parchment
McCarthy, Jos. S. (L)........1631 Gull Rd., Kalamazoo
McColl, John A...............1634 Gull Rd., Kalamazoo
McConnell, Richard R.....458 W. South St., Kalamazoo
Mellis, Richard..........611 Whitcomb St., Kalamazoo
Merriman, Richard C.........516 Whites Rd., Kalamazoo
Moe, Carl R................1324 S. Park St., Kalamazoo
Molony, Basil A...................8503 Crown Place,
Alexandria, Va. 22308
Morter, Roy A. (L)..........2421 Sheffield. Kalamazoo
Murdy, Robert C.........Box A, Kalamazoo St. Hosp.,
Kalamazoo

Neerken, Adrian J.....404 Bronson Med. Ctr., Kalamazoo
Nicholson, Robt. M.............1711 Merrill, Kalamazoo
O'Donovan, C. J...............2308 Broadmoor Drive,
Elkhart, Indiana
Overby, Chas. B., Jr.......1000 Oakland Dr., Kalamazoo
Patmos, Martin..........252 E. Lovell St., Kalamazoo
Peake, Chas. O., III.......252 E. Lovell St., Kalamazoo
Pearson, Edwin O.......458 W. South St., Kalamazoo 46
Peelen, J. W...............516 Whites Rd., Kalamazoo
Peelen, Matthew..........252 E. Lovell St., Kalamazoo
Perry, Clifton W...........1711 Merrill St., Kalamazoo
Pinkham, Raymond A.....611 Whitcomb St., Kalamazoo
Pool, John D...............1711 Merrill St., Kalamazoo
Powley, Gerald W...........1711 Merrill St., Kalamazoo
Proos, Richard A.......Western Mich. Univ., Kalamazoo
Pullon, Alton E...........1223 S. Park St., Kalamazoo
Rasmussen, Leo B.........152 N. Main St., Vicksburg
Reames, Harold R........2901 S. Westnedge, Kalamazoo
Reigel, Thomas J.........2019 Rambling Rd., Kalamazoo
Rigterink, Gerald H.......433 South Rose St., Kalamazoo
Roberts, Millard S...........1631 Gull Rd., Kalamazoo
Rockwell, Donald C. (L)....1718 Amer. Natl. Bk. Bldg.,
Kalamazoo
Roesler, Hugo K...........1141 S. Rose St., Kalamazoo
Rogers, Rodney J.........126 N. Kalamazoo, Vicksburg
Roty, August R., Jr...........252 E. Lovell, Kalamazoo
Russcher, Allan H.............252 E. Lovell, Kalamazoo
Ryan, Fredk. C.......Kalamazoo State Hosp., Kalamazoo
Rye, Wm. A.............Upjohn Company, Kalamazoo
Sage, Edward D. (L)..902 Hanselman Bldg., Kalamazoo
Scherer, Flora E. (A)........Box A, Kala. State Hosp.,
Kalamazoo
Schneider, Edward M.......Upjohn Company, Kalamazoo
Scholl, James W.............1634 Gull Rd., Kalamazoo
Scholten, Roger A..........252 E. Lovell St., Kalamazoo
Scholten, William (R)......Bronson Hospital, Kalamazoo
Schrieber, R. S. (A).......Upjohn Company, Kalamazoo
Schrier, Clarence T. M.....1000 Oakland Dr., Kalamazoo
Schrier, Thomas.....................Box 88, Comstock
Schut, Almon L.....401 Bronson Med. Center, Kalamazoo
Schwallie, Paul C. (A)..483 Sunrise Circle, Kalamazoo
Simpson, Bernard W.......610 So. Burdick, Kalamazoo
Skellenger, Wm. S.......2019 Rambling Rd., Kalamazoo
Slatmyer, Karel R., Jr...705 Hanselman Bldg., Kalamazoo
Slenger, Walworth R...........508 Village, Kalamazoo
Smith, Roger J...........723 S. Westnedge, Kalamazoo
Sofen, Morris B.......107 W. Michigan St., Kalamazoo
Southworth, M. N.........................Schoolcraft
Springgate, R. R.............1631 Gull Rd., Kalamazoo
Stewart, R. B.........705 Hanselman Bldg., Kalamazoo
Stewart, Wm. C., Jr.....2019 Rambling Rd., Kalamazoo
Stieglitz, L. D.........2615 Stadium Drive, Kalamazoo
Stiller, Anthony F. (R)........1235 N. Hillandale Dr.,
Kalamazoo
Stilwell, James R...220 Bronson Med. Center, Kalamazoo
Stryker, Homer H. (L)...........420 Alcott, Kalamazoo
Stubbs, Samuel S. (A)......1342 Lama Rd., Kalamazoo
Swann, Raymond O.......611 Whitcomb St., Kalamazoo
Talanda, Edmund.............3125 W. Main, Kalamazoo
Upjohn, E. Gifford.........Upjohn Company, Kalamazoo
Upjohn, Harold............Upjohn Company, Kalamazoo
VanArendonk, Gerald........611 Howard St., Kalamazoo
VanderVelde, K. M.....Bronson Med. Center, Kalamazoo
Varley, Alan B.........2146 Treehaven Rd., Kalamazoo
Vecchio, Thomas J.......5250 Grosse Pte. St., Kalamazoo
Verhage, Martin D.........228 W. Cedar St., Kalamazoo
Volderauer, John C.........458 W. South St., Kalamazoo
Walker, John S...........Upjohn Company, Kalamazoo
Warnke, Robt. D...........1631 Gull Rd., Kalamazoo
Weadon, Preston S.........252 S. Lovell St., Kalamazoo
Webb, Joseph P. (A)......Upjohn Company, Kalamazoo
Wedeking, Fred L.....Western Mich. Univ., Kalamazoo
Wenner, Wm. F. (A)......1715 Dover Rd., Kalamazoo
Williamson, Edwin M.....252 E. Lovell St., Kalamazoo
Wilson, Doyle E.........252 E. Lovell St., Kalamazoo
Wu, Jack F.............810 E. Center Ave., Kalamazoo
Yang, William G.........3125 W. Main St., Kalamazoo
Yaple, Edward L...........1141 S. Rose St., Kalamazoo
Youngs, Cyril A. (L)....416 So. Burdick St., Kalamazoo
Yun, Bo Sup....Bx. A, Kalamazoo St. Hosp., Kalamazoo
Zolen, Margaret H...........628 S. Park St., Kalamazoo

KENT COUNTY MEDICAL SOCIETY (106)

Adams, Frank A...526 Leonard St. N. W., Grand Rapids
Advani, Ram....................1840 Wealthy St. S.E., Grand Rapids 46506
Aitken, Geo. T.....50 College Ave. S.E., Grand Rapids 3
Albers, G. Donald..203 Paris Ave. S.E., Grand Rapids 3
Aldridge, Chas W., Jr.............153 Lafayette S.E., Grand Rapids 3
Alfenito, Felix S., Jr.............515 Lakeside Dr. S.E., Grand Rapids
Alger, George D...2410 Gaynor Ave. N.W., Grand Rapids
Alkema, Henry D.................245 State St. S.E., Grand Rapids 49502
Allen, L. Willis (A)..2401 Clover Lane, Havertown, Penn.
Allen, Ralph V. (L)..........1669 Plainfield Ave. N.E., Grand Rapids 5
Anderson, Jerry W.....245 State St. S.E., Grand Rapids
Anderson, Karl A. (A)........2663 Reeds Lake Blvd., Grand Rapids
Andre, Harvey M...500 Cherry St. S. E., Grand Rapids 3
Ashby, Robert N...201 Lafayette Ave. S.E., Grand Rapids
Avery, Noyes L., Jr. 515 Lakeside Dr. S.E., Grand Rapids
Baker, Robt. J...6850 Division Ave. S., Grand Rapids 8
Bakker, Durward J...1033 Fulton St. W., Grand Rapids 4
Balyeat, Gordon W...............150 Morningside Dr., Grand Rapids 6
Barofsky, Gerald F...808 Alger St. S.E., Grand Rapids 7
Bartek, Gordon L.......110 E. Fulton St., Grand Rapids
Basinger, Clair E...1810 Wealthy St. S.E., Grand Rapids
Baughman, Fred A., Jr.........1810 Wealthy St. S.E., Grand Rapids
Baum, Wm. C.....153 Lafayette S.E., Grand Rapids 3
Beard, Jeriel A. (A)......220 Union N.E., Grand Rapids
Beaton, James H...153 Lafayette S.E., Grand Rapids 3
Becklund, Roger W. (A)................63 S. 9th St., Minneapolis, Mn. 55402
Beeman, Carl B...515 Lakeside Dr. S.E., Grand Rapids 6
Beets, W. Clarence..124 Fulton St. E., Grand Rapids 2
Bell, Chas. M...50 College Ave. S.E., Grand Rapids 3
Benisek, George J.............322 Lakewood Dr. S.E., Grand Rapids 6
Benjamin, Howard G.............72 Sheldon Ave., S.E., Grand Rapids
Bennett, Wm. D. (A)........145 Ransom Ave. N.E., Grand Rapids
Benson, Roland R...201 Lafayette S.E., Grand Rapids 3
Bergsma, Stuart......6850 Division S., Grand Rapids 8
Beukema, Marenus J.............6850 S. Division Ave., Grand Rapids 8
Bignall, C. Rexford..............245 State Street S.E., Grand Rapids 3
Birch, Larry H.....100 Mich. St. N.E., Grand Rapids 3
Blocksma, Ralph....245 State St. S.E., Grand Rapids 3
Boelkins, Richard C.............125 Fountain St. N.E., Grand Rapids 3
Boerman, Walter J...........2410 Gaynor Ave. N.W., Grand Rapids
Boersma, Donald..26 Sheldon Ave. S.E., Grand Rapids
Boet, John T.......750 Fuller Ave. N.E., Grand Rapids
Bonzelaar, Marvin..2740 Eastern Ave. S.E., Grand Rapids
Booher, Craig E...............1810 Wealthy St. S. E., Grand Rapids 6
Botting, A. J.........2360 84th St. S.W., Byron Center
Bowman, Harold E...201 Lafayette S.E., Grand Rapids 3
Boyce, David C...515 Lakeside Dr. S.E., Grand Rapids 6
Brace, Fred C...1498 Lake Dr. S. E., Grand Rapids 6
Bratt, Harvey J.....833 Lake Dr. S.E., Grand Rapids 6
Braunschneider, Geo. E.......2410 Gaynor Ave. N.W., Grand Rapids
Brink, J. Russell....50 College Ave. S.E., Grand Rapids 3
Bull, Frank L...................72 E. Division, Sparta
Bull, R. John (A)..703 North A St., Oxnard, California
Burhans, John B...515 Lakeside Dr. S.E., Grand Rapids
Burleson, John S...531 Greenwood S. E., Grand Rapids 6
Burling, Wesley M. (L)......129 Michigan St. N. E., Grand Rapids 3
Burroughs, F. M., Jr. (A)......3307 Ottawa, Grandville
Burton, Robert D...............515 Lakeside Dr. S.E., Grand Rapids 6
Butler, Wm. J. (A).6552 Shepherd Hills, Tucson, Arizona
Byrd, Mary L...700 Kent Hills Rd. N. E., Grand Rapids 5
Capps, Samuel C...100 Michigan St. N. E., Grand Rapids
Carpenter, L. C...50 College Ave S.E., Grand Rapids 3
Cate, James R. (A)....8430 Atherton Dr., St. Louis, Mo.
Caukin, Howard S.....500 Cherry St. S.E., Grand Rapids 3
Cayce, Wm.....245 State Street S.E., Grand Rapids 3
Champion, John P.....2060 Robinson Rd., Grand Rapids
Chandler, Donald............R. R. 4, East Belt Line, Grand Rapids 5
Chase, Robert J.....833 Lake Drive S.E., Grand Rapids
Chen, Mey En (A)..........518 Belvedere Dr. S.E., Grand Rapids 6
Clahassey, Erwin G.............50 College Ave. S.E., Grand Rapids 3
Clawson, Carroll K...445 Cherry St. S. E., Grand Rapids
Claytor, Robt. W..............1424 Madison Ave. S.E., Grand Rapids 7
Clodfelder, R. Paul....937 Fulton St. W., Grand Rapids
Colon-Bonet, Cesar H........................Lakeview
Corbus, Burton R. (L)..500 Fulton St. E., Grand Rapids
Crane, Harold D...26 Sheldon Ave. S. E., Grand Rapids 2
Cremer, John A...911 Leonard St. N. W., Grand Rapids
Crissman, Richard K.............2747 Clyde Park S.W., Grand Rapids
Dales, Ernest W. (L)....843 Bristol W., Grand Rapids
Dassel, Paul M.......2641 Boston S. E., Grand Rapids 6
Davis, David B. (R)........266 Pettis Ave. N.E., Ada
Davis, Roy A.........Ferris State College, Big Rapids
Davis, Thomas B...............1810 Wealthy St. S.E., Grand Rapids 6
Dawson, Walter D...26 Sheldon Ave. S.E., Grand Rapids
Dean, Alfred (L)...........................Sagola
DeBoer, Arthur F...2435 Eastern Ave. S.E., Grand Rapids
DeBoer, Clarence J.......3011 Wilson S.W., Grandville
DeBoer, Guy W...............26 Sheldon Ave. S. E., Grand Rapids 2
Deigert, Fredk. A. (A)............3775 Oakridge Ave., Comstock Park
Delnay, Richard M.........1908 Menominee Dr. S.E., Grand Rapids 6
DeMaagd, Gerald..............143 Courtland, Rockford
DeMol, Richard J.............1414 Eastern Ave. S. E., Grand Rapids 7
Dennison, H. Eugene (M)..13 Maas Dr., Ft. Bragg, N C.
DePree, Isla G.....1810 Wealthy St. S.E., Grand Rapids
DeVel, Leon..739 Plymouth Blvd. S. E., Grand Rapids 6
DeVries, Danl.....6850 Division Ave. S., Grand Rapids
Dewey, Kent A...456 Cherry St. S.E., Grand Rapids 3
Dice, Nanette..535 Greenwood Ave. S.E., Grand Rapids 6
Dick, Mark W...146 Monroe Ave. N.W., Grand Rapids 2
Diskey, Donald G...2015 Bridge N.W., Grand Rapids 4
Dixon, Willis L...26 Sheldon Ave. S. E., Grand Rapids 2
Docter, Luebert..26 Sheldon Ave. S. E., Grand Rapids 2
Doorenbos, Harvey E. (A)....................Box 11, Muscat Oman, Se. Arabia
Doorn, Henry A.........2450 Lee S. W., Grand Rapids
Doornbos, Fred A.....245 State St. S.E., Grand Rapids
Dorain, Wallace B.............1810 Wealthy St. S.E., Grand Rapids 6
Doyle, John L.........2435 Eastern S.E., Grand Rapids
Duffin, Wallace B...1510 Millbrook St. S.E., Grand Rapids
Dye, Robert A.......124 Fulton St. E., Grand Rapids 2
Eary, L. Edmond, Jr.........222 Harper Drive, Sparta
Eaton, Robt. M. (A)....Christian Hospital, Meshed, Iran
Edholm, Curtis D...50 College Ave. S.E., Grand Rapids 3
Eggleston, Robert L...833 Lake Drive S.E., Grand Rapids
Egli, Charles T. (A)..922 35th St. S.W., Grand Rapids
Eldersveld, Herman C...815 Alger St. S.E., Grand Rapids
Ellis, Michael E.....242 Jefferson S. E., Grand Rapids
Ericsson, Kermit C. (A) Box 2323, Addis Ababa, Ethiopia
Falbisaner, G. J...3000 Monroe Ave. N.W., Grand Rapids
Farber, Chas E...50 College Ave. S.E., Grand Rapids 3
Fatum, Paul J.....2054 Cambridge S.E., Grand Rapids
Faust, Lawrence W. (L)..Morrison Lake Gardens, Saranac
Feenstra, L. H.....833 Lake Dr. S. E., Grand Rapids 6
Fellows, Kenneth E.–515 Lakeside S.E., Grand Rapids 6
Ferguson, James A...2230 Hall St. S. E., Grand Rapids 6
Ferrand, Louis G.........8149 Northland Dr., Rockford
Fitts, Ralph L.....50 College Ave. S.E., Grand Rapids 3

Fitzgerald, Erwin L...50 College Ave., S.E., Grand Rapids
Flintoff, Wm. M.............1632 Diamond Ave. N.E., Grand Rapids 5
Flynn, J. Donald..515 Lakeside Dr. S.E., Grand Rapids
Fochtman, Thos. W.............72 E. Division, Sparta
Foshee, J. Clinton (L)...........124 Fulton St. E., Grand Rapids 2
Foxworthy, John P.............50 College Ave. S.E., Grand Rapids 3
Frantz, Charles H...1810 Wealthy St. S.E., Grand Rapids
Fricke, David W.....843 Princc St. S.E., Grand Rapids
Fuller, Edson H., Jr...........514 Medical Arts Bldg., Grand Rapids 2
Fuller, Raymond E.............515 Lakeside Dr. S.E., Grand Rapids 6
Fuller, Wm. J...515 Lakeside Dr. S.E., Grand Rapids 6
Gamm, Kenneth E...153 Lafayette S.E., Grand Rapids 3
Gerard, Donald G.............311 E. Main St., Lowell
Gibbs, Floyd F...4338 Division Ave. S., Grand Rapids 8
Gilbert, Ralph H...26 Sheldon Ave. S.E., Grand Rapids
Gillett, Fredk. S...50 College Ave. S.E., Grand Rapids
Gillies, Robert W...50 College Ave. S.E., Grand Rapids
Glessner, James R., Jr...........1810 Wealthy St. S.E., Grand Rapids 6
Goldberg, Salomea J.............515 Lakeside Dr. S.E., Grand Rapids 6
Golden, Michael F. (A)..411 Sunset Dr., Downington, Pa.
Good, C. Robert..2743 DeHoop St. S.W., Grand Rapids
Graff, Russeell G...515 Lakesidc Dr. S.E., Grand Rapids
Grass, Edward J...833 Lake Dr. S. E., Grand Rapids 6
Gray, Fred B.....456 Cherry St. S.E., Grand Rapids 3
Greene, Perry W., Jr...515 Lakeside S.E., Grand Rapids 6
Griffith, Lucian S...50 College Ave. S.E., Grand Rapids 3
Grosenbaugh, Clare H...........1810 Wealthy St. S.E., Grand Rapids
Gunn, James A...1840 Wealthy St. S. E., Grand Rapids 6
Gunning, Robt. E. Lee........369 Greenwich Rd. N.E., Grand Rapids
Haeck, William......245 State St. S.E., Grand Rapids 3
Hagerman, David B. (L)......1551 Seminole Rd. S.E., Grand Rapids 49506
Hamp, Arthur K...515 Lakeside Dr. S.E., Grand Rapids 6
Harrison, Robert W............1810 Wealthy St. S.E., Grand Rapids 6
Hayes, L. W., Sr. (R)..................Howard City
Hayes, Robert E...456 Cherry St. S.E., Grand Rapids 3
Hayes, Thomas A. (A)..........198 Lab. Med. Mayo, Minneapolis, Mn. 55455
Heaton, John R.....72 Sheldon Ave. S.E., Grand Rapids
Heetderks, Dewey R. (L)........2110 Edgewood S.E., Grand Rapids
Heetderks, D. R., Jr...245 State St. S.E., Grand Rapids
Helder, Louis..1947 Hutchinson S.E., Grand Rapids 49506
Helmus, Christian..203 Paris Ave. S.E., Grand Rapids 3
Herrick, Ruth................908 E. Main St., Lowell
Hesselschwerdt, D. W...........932 Floral Drive S. E., Grand Rapids
Hill, A. Morgan..50 College Ave. S.E., Grand Rapids 3
Hill, Thos. B.............554 Durand St., East Lansing
Hodgkinson, C. P., II.............26 Sheldon Ave. S.E., Grand Rapids
Hoekstra, Andrew L.............26 Sheldon Ave. S. E., Grand Rapids 2
Hoekstra, Philip J.......68 Ransom N.E., Grand Rapids
Hoffs, Albertus J.............2607 Fredericks Dr. S.E., Grand Rapids 6
Holkebor, Henry D. (A)....1050 Spaulding Ave. S.E., Grand Rapids 6
Hollander, Stephen..1451 Grandville Ave., Grand Rapids 9
Hoogerhyde, Jack..26 Sheldon Ave. S.E., Grand Rapids 2
Horning, David J...26 Sheldon Ave. S.E., Grand Rapids 2
Hoyt, Robt. L...1810 Wealthy St. S.E., Grand Rapids 6
Hudson, A. Thomas..............72 Sheldon Ave. S.E., Grand Rapids 2
Hudson, Harry C...50 College Ave. S.E., Grand Rapids 3
Hufford, A. Ray..260 Jefferson Ave. S.E., Grand Rapids 3
Humphrey, James C.............26 Sheldon Ave. S.E., Grand Rapids 2
Hutchinson, F. A.......245 State St. S.E., Grand Rapids
Hydrick, Robt. H.......1039 W. Fulton, Grand Rapids
Ireland, Hoesa D...750 Fuller Ave. N. E., Grand Rapids
Irwin, James R...26 Sheldon Ave. S.E., Grand Rapids 6
Irwin, Jerry L.....26 Sheldon Avenue, S.E., Grand Rapids
Jack, Wm. W...1810 Wealthy St. S. E., Grand Rapids 6
Jameson, Fred M...833 Lake Dr. S.E., Grand Rapids 6
Jaracz, Walter J...634 Bridge St. N. W., Grand Rapids 4
Jaracz, Walter J., Jr.........2410 Gaynor Ave. N.W., Grand Rapids
Jarka, Robt. W...50 College Ave. S.E., Grand Rapids 3
Jarvis, Chas., Jr.............1520 Plainfield Av. N.E., Grand Rapids 5
Jensen, William B., Jr...425 Cherry S.E., Grand Rapids
Jewell, Patrick F.......245 State St. S.E., Grand Rapids
Johns, Donald C.............655 Broadview St. S. E., Grand Rapids 7
Johnston, Dan W...2440 Beechwood S.E., Grand Rapids 6
Johnston, Wm. L...245 State St. S.E., Grand Rapids 3
Jones, Edward A...346 Wealthy St. S.E., Grand Rapids
Jones, Haven E...833 Lake Drive S. E., Grand Rapids
Jui, John O. L.............4234 Lake Mich. Dr. N.W., Grand Rapids 4
Kale, Waman M. (A)..........1840 Wealthy St. S.E., Grand Rapids
Kammeraad, L. A...1810 Wealthy St. S.E., Grand Rapids
Kelley, Donald E...............515 Lakeside Dr. S.E., Grand Rapids 6
Kempers, David W.............50 College Avenue S.E., Grand Rapids
Kempter, Albert H.............1200 Lake Dr. S. E., Grand Rapids 6
Kessler, Dale L...540 Belvedere Dr. S.E., Grand Rapids 6
Ketcham, Donn W. (A)..............G.P.O. Box 78, Chittagong, E. Pakistan
Kincaid, William E............100 Michigan St., N.E., Grand Rapids 3
Klein, Jacob E. (M)..........R.R. 2, Box 30, Bangor
Klein, Thomas........833 Lake Dr. S.E., Grand Rapids
Klomparens, James T..........1662 Morningside S.E., Grand Rapids
Klooster, Gerald..5682 Greenridge Dr., Gastro Calley, Ca.
Kniskern, Paul W...26 Sheldon Ave. S.E., Grand Rapids 2
Koh, Nan Kyung..1619 Walker St. N.W., Grand Rapids
Kool, Bernard P...445 Cherry St. S. E., Grand Rapids 3
Korhonen, Bert J. (A)........1915 Lynne Lane N.W., Grand Rapids
Kraai, Harm....Med. Field Serv. Sch., Ft. Sam Houston, San Antonio, Texas
Krecke, Charles F............201 Lafayette Ave. S.E., Grand Rapids
Kreulen, Henry J...2452 Godwin S. E., Grand Rapids 7
Krhovsky, Frank J.............153 Lafayette Ave. S.E., Grand Rapids 3
Krull, Edward A...........504 St. Clair, Grosse Pointe
Kruse, Wm. T., Jr. (A)..........255 Washington S.E., Grand Rapids 3
Kuiper, K. V...2208 Madison Ave. S.E., Grand Rapids 7
Laird, Robt. G.....26 Sheldon Ave. S.E., Grand Rapids
Lalime, Ruth E.......52 Burton St. W., Grand Rapids 7
Lamberts, Austin E.............68 Ransom Ave. N.E., Grand Rapids 3
Lang, Ramon B.............1520 Plainfield Ave. N.E., Grand Rapids 5
Leep, Jos. H...1545 Diamond Ave. N.E., Grand Rapids
Lentini, Jos. R.....303 Fulton St. E., Grand Rapids 2
Levine, Robert S.....50 College Ave. S.E., Grand Rapids
Lewis, Geo. H.....3011 Wilson S.W., Grandville 49418
Lieffers, Harry (L)............26 Sheldon Ave. S.E., Grand Rapids 2
Lincer, William T...110 Fulton St. E., Grand Rapids 2
List, Carl F.......833 Lake Dr. S.E., Grand Rapids 6
Lobbes, Kenneth E.....124 Fulton St. E., Grand Rapids
Logie, James W...Ramona Medical Center, Grand Rapids
Lukens, Jack G.......245 State St. S.E., Grand Rapids 3
MacDonell, James A.............50 College Ave. S.E., Grand Rapids 3
MacIntyre, Dugald S...........515 Lakeside Dr. S.E., Grand Rapids 6
Maher, James T...405 Medical Arts Bldg., Grand Rapids
Mancewicz, Jerome F..........1156 Leonard St. N.W., Grand Rapids
Mann, Jos. D.....100 Michigan St. N.E., Grand Rapids
Marsh, John P. (L)............124 Fulton St. S. E., Grand Rapids 2

Marshall, Robert B...........100 Michigan St. N.E., Grand Rapids
Martinus, Martin..750 Fuller Avenue N.E., Grand Rapids
Marvin, John A. (A)......133 Lang Rd., Ft. Houston, San Antonio, Tx.
Mason, Warren B...50 College Ave. S.E., Grand Rapids 3
Maternowski, C. J..............515 Lakeside Dr. S.E., Grand Rapids 6
Maycroft, T. C...238 Bristol Ave. N.W., Grand Rapids 4
Maynard, Mason S...445 Cherry St. S.E., Grand Rapids 3
Mays, James D. (A)........1330 Rosewood Ave. S.E., Grand Rapids 49506
McCormick, John K.............122 Caledonia N. E., Grand Rapids 5
McDougal, Wm. J..............127 Fountain St. N. E., Grand Rapids 3
McKay, Orval I................311 E. Main St., Lowell
McKinlay, Leland M. (R)..........403 Dixie Dr. South, Howey in the Hills, Fla.
Meade, Richard H., Jr.............750 San Jose Drive, Grand Rapids 6
Mehney, Gayle H...245 State St. S.E., Grand Rapids 3
Meyer, Judith L.............1756 Newark Ave. S.E., Grand Rapids 49507
Miller, J. D.........50 College Ave., S.E., Grand Rapids
Millard, James A.....1553 Boston St. S.E., Grand Rapids
Miller, John J. (L).............1580 Water St., Marne
Miller, Theo. P...833 Lake Drive S.E., Grand Rapids 6
Moberg, Carl H.....833 Lake Dr. S.E., Grand Rapids 6
Moen, Cornetta G...215 Paris Ave. S.E., Grand Rapids
Moleski, Joseph V...26 Sheldon Ave. S. E., Grand Rapids
Moleski, Leo T...26 Sheldon Ave. S. E., Grand Rapids
Moleski, Stanley L.....1701 Pontiac Dr., Grand Rapids
Moleski, Walter L. (A)........1701 Pontiac Rd. S.E., Grand Rapids 6
Moll, Arthur M. (L)............74 Ionia Ave., N. W., Grand Rapids 2
Mollman, Arthur H. (L)......839 Union Avenue S.E., Grand Rapids
Montgomery, John C.........1810 Wealthy St. S. E., Grand Rapids 6
Moore, Douglas P.............515 Lakeside Dr. S.E., Grand Rapids 6
Morey, Edward C. (L)..533 E. 4th St., Franklin, Ohio
Mouw, Dirk R...2352 Jefferson Dr. S. E., Grand Rapids 7
Mulder, G. Arthur.............1414 Eastern Ave. S.E., Grand Rapids 7
Muldoon, James P...72 Sheldon Ave. S.E., Grand Rapids
Murphy, Miles J. (M)..718 Azalea Circle, Valdosta, Ga.
Nahn, Charles E. (A)............36th T.A.C. Hospital, A.P.O. 09132, N.Y.
Nanzig, Reinard P...153 Lafayette S.E., Grand Rapids 3
Newton, John P.....1632 Diamond N.E., Grand Rapids 5
Nickel, Kenneth C...833 Lake Drive S.E., Grand Rapids
Noordhoff, M. Samuel (A)..92 N. Chung Sham, Sec. 2, Taipei, Taiwan
Northouse, Peter B.............26 Sheldon Ave. S. E., Grand Rapids 2
Notier, Victor A...50 College Ave. S.E., Grand Rapids 3
Oates, Saml. M.....245 State St. S.E., Grand Rapids 3
O'Brien, James D.............1156 Leonard St. N.W., Grand Rapids 4
O'Driscoll, Wm. G.............515 Lakeside Dr. S.E., Grand Rapids 6
Orders, Richard L...............255 Washington S.E., Grand Rapids 3
Ortwig, Ralph W...120 N. Lang Ave., Pittsburgh 8, Pa.
Outcalt, Herman A. (A)......4460 S.W. Schools Ferry, Portland 25, Oregon
Overbeek, Ernest L...26 Sheldon Ave. S.E., Grand Rapids
Ozkan, Avni D.....55 Plymouth Rd., N.E., Grand Rapids
Paalman, Russell J...............26 Sheldon Ave. S.E., Grand Rapids 2
Palaszek, Theresa R...833 Lake Dr. S. E., Grand Rapids
Pattullo, Marshall...............515 Lakeside Dr. S.E. Grand Rapids 6
Payne, C. Allen.........1840 Wealthy St., Grand Rapids
Pedden, John R...445 Cherry St. S. E., Grand Rapids 3
Peirce, John C...515 Lakeside Drive S.E., Grand Rapids
Phelps, Leland B. (A)........201 Lafayette Ave. S.E., Grand Rapids 49503
Pilling, Warren C...833 Lake Dr. S.E., Grand Rapids 6
Piskin, M. S...1077 Leonard St. N.E., Grand Rapids 3
Plekker, Johannes D...833 Lake Dr. S.E., Grand Rapids 6
Pool, Lee R...........245 State St. S.E., Grand Rapids
Porter, Howard P., Jr...........2743 DeHoop St. S.W., Grand Rapids
Posthuma, Albert E...153 Lafayette S.E., Grand Rapids 3
Postma, Edward Y...245 State St. S.E., Grand Rapids 3
Postma, Howard F...3860 Chicago Dr. S.W., Grandville
Potchen, E. James (A)..................Inst. of Radio, 510 S. Kings Highway, St. Louis, Mo.
Pott, Abraham L...1011 Fulton St. E., Grand Rapids 3
Prothro, Winston B...1619 Walker St. N.W., Grand Rapids
Puite, Robert H...515 Lakeside Dr. S.E., Grand Rapids 6
Pusczak, George B...........312 S. Warren, Big Rapids
Raiman, Robert J...50 College Ave. S.E., Grand Rapids
Ralph, L. Paul............2547 Oakwood Drive S.E., Grand Rapids 6
Rasmussen, Richard A.............Blodgett Med. Bldg., Grand Rapids 6
Reardon, D. F.......1168 Nixon N.W., Grand Rapids 4
Reus, Wm. F.....24 Burton St. S. E., Grand Rapids 7
Reus, Wm. F., Jr...............153 Lafayette Ave. S.E., Grand Rapids 3
Riekse, James M..............2740 Eastern Ave. S.E., Grand Rapids 7
Rienstra, John C. (A)..440 Logan St. S.E., Grand Rapids
Riley, Paul M. (A)...................3713 Jackstadt, San Pedro, Ca. 90731
Ringenberg, J. C...50 College Ave. S.E., Grand Rapids 3
Robb, Chas. S.....445 Cherry St. S.E., Grand Rapids 3
Robbert, John H. (A)....70 Highland, N. Haledon, N.J.
Robson, Larry J. (A)........1029 San Jose Dr. S.E., Grand Rapids
Rodgers, Wm. L.....2865 Lake Dr. S.E., Grand Rapids
Roelofs, Charles W...........3000 Monroe Ave. N.W., Grand Rapids
Rooks, Wendell H...1339 Plainfield N.E., Grand Rapids
Roosenberg, William..........3000 Monroe Ave. N.W., Grand Rapids
Rosenzweig, Leonard............515 Lakeside Dr. S.E., Grand Rapids 6
Roth, Emil M.......604 Loraine Bldg., Grand Rapids 2
Rupke, John A...201 Lafayette Ave. S.E.. Grand Rapids
Rupp, Theo. J...50 College Ave. S.E., Grand Rapids 3
Ryan, John A.......153 Lafayette S.E., Grand Rapids 3
Ryskamp, James J. (A)..........11423 Fair Oak Dr., Silver Springs, Md.
Schaubel, Howard J...124 Fulton St. E., Grand Rapids 2
Schek, Donald C...2749 Clyde Park S.W., Grand Rapids 8
Schermerhorn, L. J. (R)..........2317 Vine Hill Rd., Santa Cruz, Calif.
Schlosser, Ralph J...456 Cherry St. S.E., Grand Rapids 3
Schneider, Geo. R..............1810 Wealthy St. S.E., Grand Rapids 6
Schnoor, Elmer W. (L)......844 Iroquois Drive S. E., Grand Rapids 6
Schnute, Louise F.....146 Monroe N.W., Grand Rapids 2
Schroeder, Alan F.........6259 Potomac, San Diego, Ca.
Schwaderer, Thos. G. (A)....31112 Huntley Square E, Birmingham
Sculley, Raymond E...12 Burton St. S.E., Grand Rapids
Seime, Reuben I.....201 Lafayette S.E., Grand Rapids
Sentkeresty, J. A...515 Lakeside Dr. S.E., Grand Rapids
Sevensma, Elisha S. (L)..........1077 Leonard N.E., Grand Rapids
Sevensma, Eugene S. (A)....Wayne Co. Gen. Hospital, Eloise
Sharda, Martin..2435 Eastern Ave. S.E., Grand Rapids
Sharp, Robert B...833 Lake Dr. S.E., Grand Rapids 6
Sidell, Richard H.............515 Lakeside Dr. S.E., Grand Rapids 6
Siebers, Bernard H...988 Maryland N.E., Grand Rapids
Siegel, Alan E..................1085 Leonard St. N.E., Grand Rapids 49503
Sikkema, Donald E. (A)........2909 Verle, Ann Arbor
Sluyter, John S.....2740 Eastern S.E., Grand Rapids 7
Smith, Dean B.....4236 Kalamazoo S.E., Grand Rapids
Smith, John H...1840 Wealthy St. S.E., Grand Rapids 6
Smith, Robt. B...26 Sheldon Ave. S.E., Grand Rapids 2

Smith, R. Earle (L)............74 Ionia Ave. N.W., Grand Rapids 2
Snider, John D...1827 Argentina Dr. S.E., Grand Rapids
Snyder, Clarence A...445 Cherry St. S. E., Grand Rapids
Snyder, Clarence H.............500 Cherry St. S. E., Grand Rapids 3
Southwick, C. H...515 Lakeside Dr. S.E., Grand Rapids 6
Southwick, G. Howard (L)........515 Lakeside S.E., Grand Rapids
Sprague, Wm. E...1039 Fulton Street W., Grand Rapids 4
Starr, Charles R...26 Sheldon Ave. S.E., Grand Rapids 2
Steffensen, W. H...1810 Wealthy St. S.E., Grand Rapids
Stonehouse, Garnet G. (R)....408 Medical Arts Bldg., Grand Rapids 2
Stoneman, Fernley..............3011 Wilson, Grandville
Stover, Virgil E...860 Gladstone S. E., Grand Rapids 6
Strong, LeRoy E...............515 Lakeside Dr. S.E., Grand Rapids 6
Stuart, Gerhardus J. (L)..........1140 Keystone Ave., River Forest, Ill.
Sugg, Cullen E. (L)..303 Fulton St. E., Grand Rapids 3
Sugiyama, Tetsuo..26 Sheldon Avenue S.E., Grand Rapids
Sun, Keh Ming..St. Marys Hosp. Lab., Grand Rapids 3
Swan, Jerome W...26 Sheldon Ave. S.E., Grand Rapids 2
Swanson, Alfred B...............1810 Wealthy St. S. E., Grand Rapids 6
Swenson, Harold C...124 Fulton St. E., Grand Rapids 2
Talbott, Timothy M. (A)......1542 Michigan St. N.E., Grand Rapids
Telego, A. J...2505 Fletcher Dr. N.E., Grand Rapids 6
TenHave, John..3515 Briggs Blvd. N. E., Grand Rapids 2
TerKeurst, Donald H...........2402 Eastern Ave. S.E., Grand Rapids 7
Tesseine, Arthur J...1328 Madison S. E., Grand Rapids 7
Teusink, James H.......................Cedar Springs
Theodore, Paul G...........1520 Plainfield Ave. N.E., Grand Rapids 5
Thompson, Athol B. (L)........1857 Golden Rain Rd., Walnut Creek, Ca. 94529
Thompson, Edward C.........153 Lafayette Ave. S.E., Grand Rapids 3
Thompson, Frank D.........4011 Reeds Lk. Blvd. S.E., Grand Rapids 6
Tiffany, Jos. C.....502 Medical Arts Bldg., Grand Rapids
Tomatis, Luis A.....456 Cherry St. S.E., Grand Rapids
Torgerson, Wm. R.............Ramona Medical Center, Grand Rapids
Townsend, Jack H...............515 Lakeside Dr. S.E., Grand Rapids 6
Troske, Robt. L...........534 Dogwood Dr. N.E., Ada
Truog, Clarence P...110 Fulton St. E., Grand Rapids 2
Turcotte, V. J., Jr...............515 Lakeside Dr. S.E., Grand Rapids 6
Vaandrager, Vernon D...........1442 Elliott St., S.E., Grand Rapids
Valdmanis, F.........2120 Lake Dr. S.E., Grand Rapids
Van Bree, Raymond S.............812 Rosalie N.W., Grand Rapids 4
Van Dam, Forrest R...........1810 Wealthy St. S.E., Grand Rapids
Vanden Berg, A. R...833 Lake Dr. S.E., Grand Rapids 6
Vanden Berg, Henry J. (L)..2933 Bonnell Road S.E., Grand Rapids
Vanden Berg, Robt. J. (A)....2151 Hubbard, Apt. 24, Ann Arbor
Vandenberg, Wm.....124 Fulton St. E., Grand Rapids
Vanden Berg, Wm. O...........50 College Ave. S.E., Grand Rapids 3
Vander Kolk, K. J...........2740 Eastern Ave. S.E.,.. Grand Rapids 7
Vander Meer, Raymond........26 Sheldon Ave. S. E., Grand Rapids 2
Vandermolen, John..124 Fulton St. E., Grand Rapids 2
Vander Ploeg, R. A...26 Sheldon Ave. S.E., Grand Rapids
Vander Ploeg, Wm. H.............833 Lake Dr. S.E., Grand Rapids 6
Van Der Veer, Corwin G...........245 State St. S.E., Grand Rapids 3
Van Dommelen, G. M.............456 Cherry St. S.E., Grand Rapids 3
Van Duine, Henry J...153 Lafayette S.E., Grand Rapids 3
Van Dyke, Harold E...........1108 Leonard St. N.E., Grand Rapids
Van Etten, Donald D. (A)..Box 13, Orange City, Iowa
Van Goor, Kornelius............26 Sheldon Ave. S.E., Grand Rapids 2
Van Otteren, G. F...............245 State St. S.E., Grand Rapids 49502
Van Portfliet, Paul..245 State St. S.E., Grand Rapids 3
Vansolkema, Andrew A...953 E. Fulton St., Grand Rapids
Van't Hof, Albert..50 College Ave. S.E., Grand Rapids 3
Van Vliet, Peter D. (A)......1416 Berkman Ct. S.W., Rochester, Minn.
Van Woerkom, Daniel..933 Leonard, N.W., Grand Rapids
Van Zwalenburg, B. R.........2116 Coronado Dr. S.E., Grand Rapids 6
Vasu, C. Mark......833 Lake Drive S.E., Grand Rapids
Veldman, Harold E...26 Sheldon Ave., Grand Rapids 2
Veltman, Jay H...........3946 G 30th St., Grandville
Venema, Jay R.............540 Overbrook Lane S. E., Grand Rapids 7
Ver Lee, Jimmie J. (A)................Galmi Hospital, Galmi Via Madaqua, Niger Republic, West Africa
Ver Meulen, John (L)....2400 Wyoming, Grand Rapids
Ver Meulen, Peter (A)..105 Baynton N.E., Grand Rapids
Verwys, A. L.......815 Alger St. S. E., Grand Rapids 7
Vining, Keats K., Jr...........515 Lakeside Dr. S.E., Grand Rapids
Vis, William R. (L)............26 Sheldon Ave. S.E., Grand Rapids 2
Visscher, H. C...515 Lakeside Dr. S.E., Grand Rapids 6
Visscher, Robert D...........515 Lakeside Drive S.E., Grand Rapids
Visser, Earl R.....425 Cherry St. S.E., Grand Rapids 2
Vogel, Anton..1204 Madison Ave. S. E., Grand Rapids
Volkel, James S.....833 Lake Drive S.E., Grand Rapids
Voss, John A.....2410 Gaynor Ave. N.W., Grand Rapids
Vroon, John........50 College Ave. S.E., Grand Rapids
Vyn, Jay D. (L)..7119 Driftwood S. E., Grand Rapids 6
Wahby, Elmer F.............300 Bostwick Ave. N. E., Grand Rapids
Walma, Daniel..26 Sheldon Avenue S.E., Grand Rapids
Wassink, Roger N...26 Sheldon Ave. S.E., Grand Rapids
Waterman, Donald F...........515 Lakeside Dr. S.E., Grand Rapids
Webb, Clarence F...833 Lake Dr. S. E., Grand Rapids 6
Webber, Jerome E.............50 College Ave. S.E., Grand Rapids 3
Weeber, Thomas A.......3011 Wilson S.W., Grandville
Wehrenberg, R. A. (A)........2602 Frederick Dr. S.E., Grand Rapids
Weller, Keith E...1200 Lake Drive S. E., Grand Rapids 6
Wells, S. Merrill, Jr. (L)......2716 Bonnell Dr. S.E., Grand Rapids 6
Wendt, Vernon E...1840 Wealthy St. S.E., Grand Rapids
Westendorp, Floyd..............6850 Division Ave. S., Grand Rapids 8
Westerhoff, Robert J...........2740 Eastern Ave. S.E., Grand Rapids
Whinery, Jos. F...50 College Ave. S.E., Grand Rapids 3
White, Robert B...........945 Riverside, Adrian 49221
Whitehouse, John D...........1201 Colorado Ave. S.E., Grand Rapids 6
Whittenberger, R. N...245 State St. S.E., Grand Rapids 3
Wiese, John L...50 College Ave. S.E., Grand Rapids 3
Wilderom, Morris..1619 Walker St. N.W., Grand Rapids
Wilkes, John B...............1328 Madison Ave. S. E., Grand Rapids 7
Wilkinson, C. A...2030 Leonard St. N.W., Grand Rapids
Williams, John R.......833 Lake Dr. S.E., Grand Rapids
Wilson, John R.....1033 Fulton St. West, Grand Rapids
Wilson, Robert J...1011 Fulton Street E., Grand Rapids
Winfield, Emery D. (L)..457 Burton S.E., Grand Rapids
Winter, Garrett E.............1967 Godfrey Ave. S. W., Grand Rapids 9
Wolters, Burton J. (A)........2441 Mildred Ave. S.E., Grand Rapids 7
Wright, Thos. B. (A)........2614 Plainfield Ave. N.E., Grand Rapids 8
Wurz, John F...201 Norwood Ave. S.E., Grand Rapids 6
Wyngaarden, Martin K.............245 State St. S.E., Grand Rapids 3

Yared, Jerome A...651 Cherry St. S.E., Grand Rapids 6
Yost, Wm. G., Jr...50 College Ave. S.E., Grand Rapids 3
Young, Donald G...100 Michigan St. N. E., Grand Rapids
Zadvinskis, Z. (A)....833 Lake Dr. S.E., Grand Rapids
Zimmerman, Wm. G...26 Sheldon Ave. S.E., Grand Rapids
Zwemer, Rodger J...1810 Wealthy St. S. E., Grand Rapids

LAPEER COUNTY MEDICAL SOCIETY (110)

Abruzzo, Anthony M.........Lapeer State Home, Lapeer
Baybura, Orhan (A)........Lapeer State Home, Lapeer
Berker, Isak O....................South Street, Davison
Bishop, G. Clare............................Almont
Boruch, Leon R.....Drawer A, Lapeer St. Hme., Lapeer
Conaway, Chas. E...........1257 N. Main St., Lapeer
Del Valle, Francisco..22651 Garrison Ave., Dearborn 48120
Dorland, Clarke.................221 Lincoln St., Lapeer
Doty, James R....................315 Clay St., Lapeer
Greavu, Cornell, Jr......................North Branch
Haney, M. Bennet........409 E. St. Clair St., Almont
Heitsch, Wm. C..................307 Clay St., Lapeer
House, Clifford................1750 Grey Rd., Lapeer
Kiehler, E. G., II.........1444 W. Genesee St., Lapeer
Kim, S. J.........1401 S. Washington Ave., Royal Oak
Kocur, Lubomira..................Drawer A, Lapeer
Lebedovych, Emil....Drwr. A, Lapeer S. Home, Lapeer
Lebedovych, Ksenia..Drawer A, Lapeer St. Home, Lapeer
Leith, Dorothy L.............240 Main St., Imlay City
Lynk, Stanley M...............4589 Lippincott, Lapeer
McBride, John R..........431 Washington St., Lapeer
Smith, Ellen........400 White Rd., Rt. 1, Columbiaville
Smith, Glenn L.......6552 Imlay City Rd., Imlay City
Zemmer, H. R....................N. Main St., Lapeer
Zolliker, Carl R. (R)..........3646 Slattery Rd., Lum

LENAWEE COUNTY MEDICAL SOCIETY (114)

Abraham, A. O...............................Hudson
Allen, Russell A...........415 W. Maumee St., Adrian
Armovit, Herminio..........236 S. Fourth St., Onsted
Balice, F. W.................128 E. Butler St., Adrian
Benz, Carl A.................308 N. Broad St., Adrian
Berghuis, John..............225 Riverside Ave., Adrian
Blanchard, Lowell E..........................Hudson
Blanden, Merwin R.........................Tecumseh
Boyd, James W...........4510 Southgate Lane, Adrian
Burch, Larry T.........10 Cairns St., Tecumseh 49286
Claxton, Wilbert T............................Britton
Coak, Richard D.......602 Pottawatamie St., Tecumseh
Cook, Carlton L.........603 E. Pottawatamie, Tecumseh
Diccion, R. A................................Addison
Dickman, Harry M...............104 Oak St., Hudson
Dustin, Richard E.......103 W. Brown St., Tecumseh
Eddy, Howard R. C.................Mill Rd., Adrian
Feeney, James L......................Mill St., Adrian
Galliani, M.................4410 Evergreen Dr., Adrian
Gamble, Kenneth..........................R. 3, Hudson
Gascoigne, Richard H.........693 Stockford Dr., Adrian
Gilkey, William C.........693 Stockford Drive, Adrian
Gilmartin, Richard.....................Mill St., Adrian
Greiner, Robert A..............Professional Bldg., Adrian
Hamilton, John.........................Mill St., Adrian
Hammel, Richard T...611 N. Evans St., Tecumseh 49286
Hammersley, Gordon..........1361 Oregon Rd., Adrian
Harrison, Robt. E.............418 W. Adrian, Blissfield
Heffron, Chas. H.............231 N. Main St., Adrian
Heffron, C. Harold (A)........231 N. Main St., Adrian
Heffron, Howard H.............231 N. Main St., Adrian
Helzerman, Ralph F.......112 S. Ottawa St., Tecumseh
Hewes, Wm. H........................Mill Rd., Adrian
Hunt, Philip..........................Mill St., Adrian
Locke, Francis A.................755 High St., Adrian
Marsh, Roland G. B. (L)............1938 Spruce St.,
Boulder, Colorado
Miller, P. Lynford..........310 E. Maumee St., Adrian
Ocamb, Harold D.......600 E. Pottawatamie, Tecumseh
O'Connor, Archie R.........109 Tecumseh Rd., Clinton
Parker, Donald A...............Bixby Hospital, Adrian
Patmos, Bernard............127 E. Maumee St., Adrian
Phelan, Alvin J..................10 Cairns, Tecumseh
Raabe, Elmer C...............................Morenci
Richey, Bert R.........765 Manitou Rd., Manitou Beach
Sarapo, Donato F.....................Mill St., Adrian
Shannon, Gordon...........................Blissfield
Skufis, Eleanor P.............201 Orchard Dr., Adrian
Skufis, Xenophon..............123 E. Chestnut, Adrian
Stewart, Landis C.................750 High St., Adrian
Van Dusen, Chad A. (L)..........R.F.D. 5, Blissfield
Wentz, Patricia..................760 Riverside, Adrian
White, Robert B..................945 Riverside, Adrian
Whitehouse, Keith H..........................Morenci
Wilson, Geo. C.......................Box 224, Clinton
Wolf, Marvin B...............689 Stockford Dr., Adrian
Wynn, Geo. H..............1115 W. Maumee, Adrian

LIVINGSTON COUNTY MEDICAL SOCIETY (118)

Barton, Thos. A...............116 N. Michigan, Howell
Clarke, Niles A.............624 Spencer Rd., Brighton
Damstra, Donald L.......12893 E. Grand River, Brighton
Duffy, Ray M. (L)............P.O. Box 106, Pinckney
Granowski, Karol....McPherson Comm. Hlt. Ctr., Howell
Harebottle, Norman.........................Fowlerville
Hauer, R. Fred.............................Fowlerville
Hendren, Jesse J. (R).......................Fowlerville
Higby, Thomas F...........................Fowlerville
Hill, Harold C...........116 N. Michigan Ave., Howell
Hoffman, Stanley L..........1200 Byron Road, Howell
May, Louis E....................City Route 4, Howell
Perry, Florence J. C.............17640 San Rose Ave.,
Lathrup Village
Phillips, R. W..............................Hamburg
Polack, Robt. T.......1215 Lakeside Dr., Howell 48843
Schenden, A. J. (R)......2163 Medford Rd., Ann Arbor
Sheng, Luke H. C.......111 W. Grand River, Brighton
Stuber, Roscoe V...............1200 Byron Rd., Howell
Walker, Enos G..........4485 Cordley Lake, Lakeland
Wang, Stella K. C............111 Grand River, Brighton
Woodworth, Edwin S...........1200 Byron Rd., Howell

LUCE COUNTY MEDICAL SOCIETY (122)

Eadie, Gordon A.....Est. Upper Health Dept., Newberry
Gibson, Robt. E. L., Jr.......207 W. John St., Newberry
Grennan, Lawrence E............1344 Northlawn N.E.,
Grand Rapids
Hicks, R. P................210 W. John St., Newberry
Kearney, Martin J.......Newberry State Hosp., Newberry
Keizer, B. G..........Newberry State Hosp., Newberry
Purmort, Wm. R., Jr....Newberry State Hosp., Newberry
Surrell, Matthew A.........210 W. John St., Newberry
Thompson, Thos. W...........Gen'l Del., Traverse City

MACOMB COUNTY MEDICAL SOCIETY (126)

Alexander, James H.....25815 Harper, St. Clair Shores
Alvarez, Mercedes......11686 Eleven Mile Rd., Warren
Ambrose, Robt. H.....18801 E. Ten Mile Rd., Roseville
Arellano, Miguel A...........21500 Mound Rd., Warren
Audretsch, F. E...........36275 Alfred, New Baltimore
Barker, John G.........8050 Warren Blvd., Center Line
Beecher, Alvin J..............21501 Kelly, East Detroit
Bigley, Bernard............35992 Gratiot, Mt. Clemens
Biluk, Frank J...............G.M. Tech Center, Warren
Bishai, Yousef B.....11477 E. Twelve Mile Rd., Warren
Bower, Allen B. (L)..........................Armada
Brown, Leland C.......21536 Parkway, St. Clair Shores
Bryce, James W.....25219 Van Dyke Ave., Center Line
Carruthers, W. B...303 Monitor Leader Bld., Mt. Clemens
Chabator, George..............294 Benjamin St., Romeo
Charbeneau, Harold P.......229 S. Gratiot, Mt. Clemens
Charbonier, Luis M...11868 E. Eleven Mile Rd., Warren
Clay, Joel W.........263 S. Gratiot Ave., Mt. Clemens
Cohen, Alan..........12500 Twelve Mile Rd., Warren
Cohen, Alberto........25705 Stoneycroft Dr., Southfield
Colah, Sorab A,..708 Monitor Leader Bl., Mt. Clemens
Collon, David (A) D.D.S.......................Romeo
Colombo, John..........20927 Kelly Rd., East Detroit
Corbett, John..............225 S. Gratiot, Mt. Clemens
Cosio, Jose............St. Joseph Hospital, Mt. Clemens
Courtney, Rufus S.........37546 Gratiot, Mt. Clemens
Croman, Jos. M., Jr. (R)..131 Market St., Mount Clemens
Curatolo, Victor..........67 Cass Ave., Mount Clemens
Darian, H. B...........11528 E. 12 Mile Rd., Warren
Deal, Harold R...............23700 Van Dyke, Warren
Deocampo, E...........20720 Maxine, St. Clair Shores
Deocampo, Nestor D.....11477 Twelve Mile Rd., Warren
Depaulis, Dario C...........22770 Kelly, East Detroit
Dragulescu, Paul............27440 Hoover Rd., Warren
Dudzinski, Edmund J.............424 Washington St., New Baltimore
Ebner, Charles M.......26401 Harper, St. Clair Shores
Ekelman, Seymour B.........14 Belleview, Mt. Clemens
Ellias, Elmer P...............23700 Van Dyke, Warren
Engels, John A...............69311 N. Main, Richmond
Erkfitz, Arthur W...26401 Harper Ave., St. Clair Shores
Finn, James Wm...................46056 Cass, Utica
French, Lawrence W.....25815 Harper, St. Clair Shores
Fulgenzi, Andrew A...17301 E. Eight Mile Rd., E. Detroit
Gerbasi, Francis......81 Lochmoor Blvd., Grosse Pte. Shs.
Gesser, Charles..17800 E. Eight Mile Rd., Harper Woods
Goldin, Morris I.............6902 Chicago Rd., Warren
Goldman, Bernard J.....243 S. Gratiot Ave., Mt. Clemens
Gonzalez, Salvador..........1756 Allard, Gro. Pte. Wds.
Hahne, Otto H.......8425 E. Twelve Mile Rd., Warren
Hartman, Waldemar B...1416 S. Gratiot, Mount Clemens
Hiller, Herbert M.....13500 E. Twelve Mile Rd., Warren
Hirzel, Leon S...................33080 Garfield, Fraser
Horvath, Julius............18847 Rosetta, East Detroit
Hoski, A. Joseph........8425 E. Twelve Mile, Warren
Hranchook, Michael..........30001 Van Dyke, Warren
Hull, Frank J.............38224 Jonathan, Mt. Clemens
Iglesias, Ernesto R.........608 Monitor Leader Bl., Mt. Clemens
Isaacs, Eli M...............14230 Greenbriar, Oak Park
Isbey, Edward K.........25020 Van Dyke, Center Line
Ivkovich, Peter (A)............12501 E. 23 Mile, Utica
Jacobs, Manuel..........23700 Van Dyke Ave., Warren
Jewell, James H.......Roseville Theatre Bldg., Roseville
Kane, John P...............67 Cass Ave., Mt. Clemens
Kane, Peter V...............67 Cass Ave., Mt. Clemens
Kane, Wm. J. (L)..171 North Avenue, Mount Clemens
Keitges, P. W...........Detroit Memorial Hosp., Detroit
Kingsley, Joyce W., Jr...18801 Ten Mile Rd., Roseville
Kipp, Paul R...............14 Belleview, Mt. Clemens
Kirtland, Wm. B., Jr...18801 E. Ten Mile Rd., Roseville
Klein, Alfred A.............23700 Van Dyke, Warren
Knoblauch, K. H.....8425 Twelve Mile Rd. E., Warren
Kokeny, Wm. J.....23700 Van Dyke Ave., Warren 48093
Kommel, Richard M.....26510 Dundee, Huntington Wds.
Krieger, Bruce...................15250 Park, Oak Park
Kripke, Morton J..................11255 Hall Rd., Utica
Kroon, Joseph D...........37984 Bonkay, Mt. Clemens
Kuntzman, Carl E...........260 Estld. Ctr. Prof. Bldg., Harper Woods
Kurtz, Hyman (A)........21414 Hillside, Mt. Clemens
Kypros, George P.....26401 Harper St., St. Clair Shores
Laporte, Lawrence A...356 N. Clifton Rd., Birmingham
Lapp, Charles..................7817 McClellan, Utica
Lee, Thomas E.........13403 E. 13 Mile Rd., Warren
Levi, Charles........8262 E. Twelve Mile Rd., Warren
Llaneza, Onofre B.......214 Harper Ave., St. Clair Shrs.
Lubera, Richard J.....25520 Little Mack, St. Clair Shrs.
Lublin, Ann............5224 St. Antoine, Detroit 48202
Maguire, Andrew J...........45569 Van Dyke, Utica
Marinelli, Ralph......8252 E. Twelve Mile Rd., Warren
Mark, Hansi............8236 E. 12 Mile Rd., Warren
Martin, Wm. L..................117 S. Main St., Romeo
Mattes, Max W...........18456 Wildemere, Detroit 21
Matthews, C., Jr...........14 Belleview, Mt. Clemens
Maxim, Edward S.
Mayer, Mary L...1092 Beaconsfield Rd., Grosse Pte. Pk.
McGinty, John D.........243 S. Gratiot, Mt. Clemens
McMorrow, Kathryn............28526 Hoover, Warren
Menczer, Richard......31170 Hoover Rd., Warren 48093
Merametdjian, Krikor........22841 Van Dyke, Warren
Merritt, Jule J.....36640 S. Gratiot Ave., Mt. Clemens
Messmer, Harold O.............7817 McClellan, Utica
Meyers, Sidney S...............28477 Hoover, Warren
Miller, Sidney S.............28477 Hoover Rd., Warren
Moore, Geo. F. (L)........69434 N. Forest, Richmond
Morris, Gerald W.............14 Belleview, Mt. Clemens
Mulligan, Philip T.............612 Monitor Leader Bl., Mount Clemens
Nance, Marion E...........33080 Garfield Rd., Fraser
Nutting, Helen M..22631 Greater Mack, St. Clair Shores
Ornstein, Chas..............21701 Kelly Rd., E. Detroit
O'Shee, Vincent......8216 E. Twelve Mile Rd., Warren
Oughtred, Orville........26401 Harper, St. Clair Shores
Pacho, Marc......................27075 Gail, Warren
Paris, Delmo........18801 E. Ten Mile Rd., Roseville
Parmelec, N. H.............52080 Van Dyke Rd., Utica
Perez, Florence....................27075 Gail, Warren
Porretta, Anthony C...2112 Venier Rd., Grosse Pte. Wds.
Pugliesi, Frank J...........20927 Kelly Rd., E. Detroit
Ragheb, Moufid............705 N. Valley Chase Rd., Bloomfield Hills
Rakotz, Gerald........13087 Eleven Mile Rd., Warren
Ramirez, C. A.........St. Joseph Hospital, Mt. Clemens
Ramos, Antonio E...........29846 Schoenherr, Warren
Rietzel, Rufus H...199 S. Gratiot Ave., Mount Clemens
Reizen, Maurice S...119 W. Washtenaw, Lansing 48904
Revere, Jos O.......192 S. Gratiot Ave., Mount Clemens
Riddle, Charles B.............620 Eastland Prof. Bldg., Harper Woods
Rinkenberger, E. A.....243 S. Gratiot Ave., Mt. Clemens
Rivkin, Jos...............14 Belleview, Mount Clemens
Rooney, Robert..............23700 Van Dyke, Warren
Roth, Geo. E...........19136 Mendota Ave., Detroit 21
Rothman, Arthur M.....22422 Gratiot Ave., East Detroit
Rourke, Ronald E...21503 Harper Ave., St. Clair Shores
Rousseau, Daniel L...Monitor Leader Bldg., Mt. Clemens
Ruedisueli, C. A.......19 Breitmeyer Pl., Mount Clemens
Rush, Wm. E.............St. Johns Hosp., Detroit 36
Russell, Paul......308 Monitor Leader Bld., Mt. Clemens
Ryan, Jack............23700 Van Dyke Ave., Warren
Ryan, Thomas E.........39310 Gary Ave., Mt. Clemens
Salot, Russell F.........67 Cass Ave., Mount Clemens
Samet, Norman..............310 Monitor Leader Bld., Mt. Clemens
Sarnacki, Carl J.....8425 Twelve Mile Rd. E., Warren
Scher, Jos. N.............130 Cass Ave., Mount Clemens
Scher, Sydney..........132 Cass Ave., Mount Clemens
Schmunk, Robert F.......136 Cass Avenue, Mt. Clemens
Shawky, Yehya A....8425 E. Twelve Mile Rd., Warren
Shaya, Ezra S..................31170 Hoover, Warren
Sheppard, Lawrence F...........23700 Van Dyke Ave., Warren 48089
Sherbin, Herbert D.....12500 Twelve Mile Rd., Warren
Siegfried, Edward G...229 S. Gratiot Ave., Mt. Clemens
Silverman, M. P...........21321 Harper, St. Clair Shrs.
Simmons, Milton F...12500 E. Twelve Mile Rd., Warren
Sims, Wm. N...........229 S. Gratiot, Mount Clemens
Singer, Nelson........22100 Gratiot Ave., East Detroit

Stanton, James..........225 S. Gratiot, Mt. Clemens
Starbird, Wm. A.........8216 E. 12 Mile Rd., Warren
Starkman, Morris.............28477 Hoover, Warren
Steele, George H...........229 S. Gratiot, Mt. Clemens
Steinberger, Eugene..........23700 Van Dyke, Warren
Stepka, Joseph E.................7817 McClellan, Utica
Stief, Kirwin......218 N. Christine Circle, Mt. Clemens
Stone, Julius ....67 Cass Ave., Mt. Clemens
Stoyka, Charles........21503 Harper, St. Clair Shores
Stroude, D. E., D.D.S. (A)......8425 Twelve Mile Rd., Warren
Stryker, Oscar D. (L)..43525 Elizabeth Rd., Mt. Clemens
Sturm, Fredk. A.........76 Lochmoor, Grosse Pointe 36
Suksta, Adolph W...........23350 Gratiot, East Detroit
Suzuki, M...................23700 Van Dyke, Warren
Thompson, Alfred A.....126 Cass Ave., Mount Clemens
Tinkey, L. Leo.........8306 Twelve Mile Rd., Warren
Trausue, David (M)....13403 E. 13 Mile Rd., Warren
Urbancic, William................14914 Coyle, Detroit
Vaughn, Charles......1223 Buckingham, Gro. Pte. Pk.
Weiss, Jack I.............23700 Van Dyke Ave., Warren
Whitley, Alec....30233 Jefferson Ave., St. Clair Shores
Wilde, Maurice M.............5930 Chicago, Warren
Wiley, D. Bruce (L)............921 Coolidge, Apt. 3, Lansing 48912
Wilson, Norman R.....225 S. Gratiot Ave., Mt. Clemens
Witus, Carl.............21349 Kelly Rd., East Detroit
Wolf, Ervin....56 Breitmeyer Place, Mt. Clemens 48045
Wyte, Wm. C.........263 S. Gratiot Ave., Mt. Clemens
Yamasaki, Ken..............23700 Van Dyke, Warren
Zavela, Dan..........679 N. Renaud, Grosse Pte. Wds.
Zook, Mr. Gilbert E. (A)..253 S. Gratiot, Mt. Clemens
Zucker, Norman..........26401 Harper, St. Clair Shrs.

MANISTEE COUNTY MEDICAL SOCIETY (130)

Futterer, LeRoy A.........Forest Clinic Bldg., Manistee
Garneau, Robt. R.........Forest Clinic Bldg., Manistee
Gunderson, Edw. P., Jr.....Greenbush Street, Manistee
Hansen, Ernest C...............326 First St., Manistee
Kiley, James A..................310 9th St., Manistee
Konopa, John F...............57 Poplar St., Manistee
Miller, Ernest B...............326 First St., Manistee
Ramsdell, Homer A. (L)......398 River St., Manistee
Rosenow, K. G..........Forest Clinic Bldg., Manistee
Schwarz, Marlowe L.........................Onekama
Schwing, Donald N.........Forest Clinic Bldg., Manistee
Wild, David A...................310 9th St., Manistee

MARQUETTE-ALGER COUNTY MEDICAL SOCIETY (134)

Acocks, James R.......Morgan Hgts. Sanat., Marquette
Amolsch, Arthur L...........1008 Bluff St., Marquette
Bennett, Matthew C...1414 W. Fair Avenue, Marquette
Berry, Robt. F.......1414 W. Fair Avenue, Marquette
Bertucci, Jos. P.............114 S. First St., Ishpeming
Bolitho, Thos. B.......1414 W. Fair Avenue, Marquette
Bujard, Robert S.........1414 W. Fair Ave., Marquette
Carefoot, Rankin L...1414 W. Fair Avenue, Marquette
Casler, Wilbur L. (L)....131 E. Ridge St., Marquette
Celori, Luciano............119 S. Front St., Marquette
Conley, Donal T.......1414 W. Fair Avenue, Marquette
Cooperstock, Moses......1414 W. Fair Ave., Marquette
Corcoran, Wm. A. (L)......200 S. Main St., Ishpeming
Drury, Chas. P. (R)....416 E. Hewitt Ave., Marquette
Elzinga, Eugene R.....1414 W. Fair Avenue, Marquette
English, John W.......1414 W. Fair Avenue, Marquette
Flores, R.....................613 Lake St., Marquette
Green, Southgate J.............................Gwinn
Hopkins, William F.....1414 W. Fair Avenue, Marquette
Hornbogen, Danl. P.....1414 W. Fair Avenue, Marquette
Howe, Lloyd W. (L)....Savings Bank Bldg., Marquette
Huffman, Elston R.....1414 W. Fair Avenue, Marquette
Humphrey, William C.......829 Croix Street, Negaunee
Jaedecke, Robt. G........................829 Croix, Negaunee
Kane, Elizabeth D. (R)..418 W. Magnetic, Marquette
Knutson, Geo. O. (A)......125 E. Main St., Negaunee
Koenig, Harry..........540 E. Division St., Ishpeming
Kronschnabel, E. F.....1414 W. Fair Avenue, Marquette
Lambert, Warren C.....1414 W. Fair Avenue, Marquette
Lexmond, M. J...........524 Mather Ave., Ishpeming
Lincke, E. T.........1414 W. Fair Avenue, Marquette
Lyons, James W.............803 N. 3rd St., Marquette
Matthews, Norman L...N. Mich. Child Clinic, Marquette
Mudge, Thomas J.....1414 W. Fair Avenue, Marquette
Mudge, Wm. A. (L)..........108 Ridge St., Negaunee
Narotzky, Archie S...........Miracle Circle, Ishpeming
Newell, Wilson G...........101 S. Fourth, Ishpeming
Niemi, Osmo (R)....................Box 151, Gwinn
Oldham, Earle S...No. Mich. Univ. Hlh. Serv., Marquette
Olson, Walter R.............Sand Point Rd., Munising
Pearson, Wallace G.....1414 W. Fair Avenue, Marquette
Pillote, Florence A.........26 Lakeview Dr., Marquette
Pillote, John F.......1414 W. Fair Avenue, Marquette
Rosenbaum, Louis..........524 Mather St., Ishpeming
Sabin, Fredk. C.......1414 W. Fair Avenue, Marquette
Schmidt, Merle C. (A)..111 W. 39th St., Vancouver, Wa.
Schroeder, W. Gene...........524 Mather St., Ishpeming
Schweinsberg, Sara K. D. (A)..507 Bemis Rd. R.F.D., Saline
Tobin, James F., Jr.........724 Elliott Ave., Ishpeming
Van Riper, Paul (L).........................Champion
Wall, David R...........Aitamont & Fisher, Marquette
Williams, Reginald G.......524 Mather St., Ishpeming
Wilson, George M., Jr...1414 W. Fair Avenue, Marquette
Wright, Kenneth C.....1414 W. Fair Avenue, Marquette

MASON COUNTY MEDICAL SOCIETY (138)

Bacon, Herbert G.............101 N. Main, Scottville
Boldyreff, Ephraim B..........................Custer
Boon, A. Floyd................203 N. Ferry, Ludington
Carney, John R.............202 N. Park St., Ludington
Carney, Ruth V. C.......202 N. Park Ave., Ludington
Castillani, R. J...............P.O. Box 349, Ludington
Clark, Harry L. (L)..510 N. Lakeshore Dr., Ludington
Craymer, Austin...............420 N. Rath, Ludington
Ewing, R. L.............600 Tinkham Ave., Ludington
Hoffman, Howard B.....7418 Golfwood Rd., Ludington
Kellawan, Karl K...........................Scottville
Kleinschmidt, Gladys J.........401 E. Ludington Ave., Ludington
Martin, Wm. S...............107 Ludington, Ludington
Mayer, Gerry............600 Tinkham Ave., Ludington
Morrow, Wm. J............119 N. James St., Ludington
Ostrander, Robt. A...2945 E. 1st Street, Tucson, Arizona
Paukstis, Chas. A...........111 E. Court St., Ludington
Sutter, Wm. F.............220 S. James St., Ludington

MECOSTA-OSCEOLA-LAKE COUNTY MEDICAL SOCIETY (142)

Asplund, Charles M.......121 S. Michigan, Big Rapids
Bruggema, Jacob......................Main St., Evart
Franklin, Benj. L. (L)..........................Remus
Haldeman, Jack..........1014 S. State St., Big Rapids
Hickox, Leland A.......1014 S. State St., Big Rapids
Kilmer, Paul B.............................Reed City
Kowaleski, Edward H..........................Remus
Lincoln, Norman V.........................Reed City
Merlo, Frank A.........206 S. Michigan St., Big Rapids
Nelson, Lorenzo R...............R. F. D. 1, Baldwin
Pratt, Gordon C.........208 W. Saginaw, East Lansing
Tyson, James L.......1014 South State St., Big Rapids
Van Auken, Edward W.....229 S. Warren, Big Rapids
Walters, James E.........1014 S. State St., Big Rapids
White, John A...........121 S. Michigan St., Big Rapids

MEDICAL SOCIETY OF NORTH CENTRAL COUNTIES (150)

Baker, Ophelia P..........199 Fairview, West Branch
Baker, Thomas A..........199 Fairview, West Branch
Barstow, Richard G..........Gaylord
Blaha, Vernon B..........Grayling
Boehm, John D. (R)..........West Branch
Bontrager, W. E..........Mio
Clippert, C. G. (R)..........308 Michigan Ave., Grayling
Coulter, Keith D. (R)..........Box 138, Alden
Crandell, Clare H. (R)..........West Branch
Dosch, Paul..........Grayling
Forney, Fred A. (L)
Hayes, Louis F..........Gaylord
Henig, Benj. E..........Grayling
Howarth, Thos W..........Gladwin
Jardine, Hugh M..........West Branch
Kieler, George E..........Roscommon
Koltay, Marta Szego....Tolfree Mem. Hosp., West Branch
Koltay, Oscar P.......Tolfree Mem. Hosp., West Branch
Libke, Robert S..........Gaylord
Mills, Georgia..........Mesick
Oppy, Charles L..........Roscommon
Peckham, Richard C..........Gaylord
Potvin, Clifford D..........308 Michigan Ave., Grayling
Rusak, R. D..........Gladwin
Schaiberger, Geo. L..........West Branch
Stealy, Stanley A. (L)..........Grayling
Timreck, Harold A..........Gladwin
Van Oosten, Howard E.......117 Burgess, West Branch
Wiegerink, L. T..........West Branch

MENOMINEE COUNTY MEDICAL SOCIETY (146)

Agneberg, Nils O..........531 1st St., Menominee
Brukardt, Herman R..........534 First St., Menominee
Dewane, Francis J..........413 10th Ave., Menominee
Glickman, L. Grant..........958 First St., Menominee
Gonty, Arthur......St. Joseph Lloyd Hosp., Menominee
Heidenreich, John R..........Daggett
Hopson, George H. (A)..19186 Santa Barbara, Detroit
Hopson, Patricia C. (A)..19186 Santa Barbara, Detroit
Jones, Wm. S. (L)........1146 Tenth Ave., Menominee
Jones, Wm. S., Jr..........1146 10th Ave., Menominee
Kerwell, Karm C. (L)......P. O. Box 17, Stephenson
Olson, Robt. C. (A)..........4873 N. Oakland Ave., Milwaukee, Wi. 53217
Towey, John W. (L)..........1717 Orchid Lane, Middleton, Wisc.

MIDLAND COUNTY MEDICAL SOCIETY (154)

Athay, R. M. (R)..........4622 Concord Ct., Midland
Benjamin, Mac B..........307 Cass St., Sanford
Bennett, Donald R..........3902 Applewood, Midland
Bernier, Jos. A..........218 E. Railway, Sanford
Blackhurst, J. F..........2715 Ashman Street, Midland
Blackhurst, Robt. T..........Blackhurst Bldg., Midland
Bowsher, Robt. E..........4005 Orchard Dr., Midland
Bridge, Robt. G..........2715 Ashman, Midland
Bulmer, Dan J..........2707 Ashman St., Midland
Bush, Raymond C..........808 W. Sugnet, Midland
Buskirk, Maurice D..........110 W. Sugnet, Midland
Cline, J. Daniel..........504 Linwood Dr., Midland
Devlin, James A..........115 Jerome, Midland
Ellis, Ruth..........2510 Ashman, Midland
Fields, Dozier N., Jr..........515 W. Main St., Midland
Gay, Harold H..........Dow Chemical Co., Midland
Goethe, Roy M..........110 W. Sugnet, Midland
Gordon, Harold L..........Dow Chemical Co., Midland
Grant, Robert..........2931 Manor Dr., Midland
Grewe, Norman C..........501 E. Pine St., Midland
Haberstroh, Colleen..........3710 Applewood, Midland
Harrigan, William E..........2706 Louanna, Midland
Heffernan, D. D..........402 Dartmouth, Midland
Holder, Benj. B...Dow Chem. Co. Med. Dept., Midland
Howe, Irvin M..........110 W. Sugnet, Midland
Howell, Richard H..........2719 Ashman, Midland
Ittner, Martin J..........217 N. Saginaw Rd., Midland
Kramer, Chas. G.....Box 469, Dow Chemical, Midland
Kremski, John A..........Midland Hospital, Midland
Kwast, Harold A..........2715 Ashman, Midland
Linsenmann, Karl W..........2604 Manor Dr., Midland
Marks, V. A..........2706 Louanna, Midland
Maynard, Wm. A..........208 N. Fourth, Coleman
Meisel, Edward H., Jr..........Masonic Bldg., Midland
Mesaros, Michael P..........44 Ashman Circle, Midland
Moench, G. Fredk..........147 Center St., Sanford
O'Hora, Bernard A..........110 W. Sugnet, Midland
Pike, Melvin H..........224 E. Larkin, Midland
Pollock, Robert..........2707 Ashman, Midland
Poznak, Leonard A..........4005 Orchard Dr., Midland
Randolph, Stephen H.....201 E. Ellsworth St., Midland
Redmon, William B..........115 Jerome, Midland
Sanislow, Charles A..........2707 Ashman St., Midland
Scharf, Forrest..........4005 Orchard Dr., Midland
Scharnweber, H. C..........Dow Chemical Co., Midland
Schoff, Charles A..........2706 Louanna, Midland
Shipman, Charles W.......2110 16th St. E. Med. Bl., Bay City 48706
Shriner, John W..........902 E. Ashman, Midland
Smith, Donald S., Jr. (M)......2715 Ashman, Midland
Smock, Sidney N..........3911 Moorland Drive, Midland
Stewart, Richard..........Dow Chemical Co., Midland
Thamarus, W. E., Jr.......5801 Highland Dr., Midland
Towsley, Wilbur D..........515 W. Main St., Midland
Uhland, Hugo..........Dow Chemical Co., Midland
Ulmer, George..........4005 Orchard, Midland
Westphal, Harry O..........3102 Swede Rd., Midland
Willison, Chas. H..........122 Townsend, Midland
Yobst, G. James..........2719 Ashman, Midland

MONROE COUNTY MEDICAL SOCIETY (158)

Ames, Florence D. (L)......2 W. Noble Ave., Monroe
Barrett, C. D., Sr. (L)..........Court House, Monroe
Black, Charles E..........721 N. Macomb St., Monroe
Blakey, Leonard C..........745 N. Monroe St., Monroe
Bond, Wm. W..........222 N. Monroe, Monroe
Burroughs, J. J..........745 N. Monroe St., Monroe
Cigany, Zoltan B..........Carleton
Clark, Bruce..........8308 Lewis Ave., Temperance
Diehl, George Z..........721 N. Macomb, Monroe
Douglas, Dale W..........124 Cole Rd., Monroe
Dranginis, E. J..........Monroe Hospital, Monroe
Ewing, Robt. T..........130 Maple Blvd., Monroe
Flanders, John P..........753 N. Monroe St., Monroe
Frary, Reginald A..........505 Strasburg, Monroe
Freud, John W..........1262 N. Macomb St., Monroe
Golden, Jean Dace..........304 Washington St., Monroe
Hensel, Hilda M..........12 E. 4th St., Monroe
Hnatczuk, Nikolas......8078 Summerfield, Lambertville
Johnson, A. Esther..........751 N. Monroe St., Monroe
Kelso, S. Newton, Jr..........116 Cole Rd., Monroe
King, John R..........12 East 4th St., Monroe
Laboe, Edward W. (R)........424 Hollywood, Monroe
Lammers, Gerald P..........Ida
Liedel, Warren J..........136 Cole Rd., Monroe
Loan, G. B..........725 N. Monroe, Monroe
Long, Edgar C..........1310 N. Macomb St., Monroe
Lusher, William T.....8308 Lewis Avenue, Temperance
McGeoch, Reginald W. (L)..718 N. Macomb St., Monroe

McMillin, John H. (L)........423 E. Elm St., Monroe
Meier, Walter A..................134 Cole Rd., Monroe
Middleton, W. S..........219 W. Front Street, Monroe
Ozdaglar, Mehmet N..........721 N. Macomb, Monroe
Pena, Emilio...................424 Monroe St., Dundee
Pinkus, Hermann K. B...........12 E. 4th St., Monroe
Reisig, Albert H.............1 S. Monroe St., Monroe
Sisman, Bernard................130 Cole Rd., Monroe
Stephenson, Joy O...........15463 S. Monroe, Monroe
Streicher, Robt. G.............729 N. Monroe, Monroe
Tomlinson, Ledyard H...........8718 Main St., Newport
Wagar, Spencer H...........31 Washington St., Monroe
Weeks, Vernon L..............326 N. Monroe, Monroe
Wilkins, Rolland W.............118 Cole Rd., Monroe
Williams, Robt. J...........31 Washington St., Monroe

MUSKEGON COUNTY MEDICAL SOCIETY (162)

Aardema, Austin A...........1470 Peck St., Muskegon
Allen, Richard T.........768 Broadway, Muskegon Hts.
Alt, William J...........Medical Arts Center, Muskegon
Annessa, G. W..........Medical Arts Center, Muskegon
Askam, Ralph F.........Medical Arts Center, Muskegon
Atkinson, Annie L......................R. 1, Montague
August, Ralph V.....72 E. Broadway, Muskegon Heights
Barnes, James W........102 Professional Bldg., Montague
Barnett, James M. (M)..............419 Springwood, San Antonio, Tx. 78216
Benedict, Arthur L., Jr...22 W. Southern Ave., Muskegon
Bloom, Robt. E.........Medical Arts Center, Muskegon
Bolthouse, Robt. E........2101 Peck St., Muskegon Hts.
Bond, Wm. H...............1282 Arthur St., Muskegon
Boyd, DeVere R................1735 Peck St., Muskegon
Boyd, Jack L..........450 W. Western Ave., Muskegon
Bradshaw, Park S.......Medical Arts Center, Muskegon
Bultema, James H..............1470 Peck St., Muskegon
Busard, J. Max................1200 Ransom, Muskegon
Busard, Thos. R...........Medical Arts Center, Muskegon
Carlson, Mr. James C. (A)....2060 Belmont, Muskegon
Chapin, Wm. S. (A)....2136 Sanford, Muskegon Hgts.
Chiasson, Antonio.........4056 Nob Hill Dr., Muskegon
Christophersen, J. W.....1276 Lake Shore Dr., Muskegon
Clapp, Henry W.....202 Westgate Med. Twr., Muskegon
Clifford, James D. (A)..........452 Maple, Plymouth
Closz, Harold F. (L)....1727 Jefferson St., Muskegon
Clowater, Robert A..........1092 Holton Rd., Muskegon
Cornell, Homer E.............303 Westgate Med. Twr., Muskegon 49441
Crawford, John W., Jr.......1470 Peck St., Muskegon
Cronick, Anne B..........435 Whitehall Rd., Muskegon
Dart, Dorothy O. (A)............428 W. Franklin St., Salisbury, N. Carolina
Dasler, Adolph F.............1507 Peck St., Muskegon
De Leeuw, Henry...........4090 Higate Rd., Muskegon
DeYoung, Roland W.........3800 Monteview, Muskegon
Diskin, Frank..........1324 Marquette Ave., Muskegon
Dykhuizen, H. D.....289 W. Western Ave., Muskegon
Ellis, Nicholas J.......1891 Lake Shore Dr., Muskegon
Engstrom, Albert D...........117 W. Colby, Whitehall
Farmer, John C.........Medical Arts Center, Muskegon
Fillingham, Enid (R)........1034 Giles Rd., Muskegon
Fleischmann, Chas. B. (L)..1573 Jefferson St., Muskegon
Fles, Robt. J..................1715 Peck St., Muskegon
Folsom, John D................1706 Peck St., Muskegon
Frandsen, Philip H............1470 Peck St., Muskegon
Fugate, E. M.......206 Westgate Med. Twr., Muskegon
Gaikema, Everett W. (R)..605 First St., North Muskegon
Garber, Frank W., Jr...........1732 Peck, Muskegon
Garber, Frank W. (L)..235 Monroe Avenue, Muskegon
Garrison, Robt. E., Jr...210 Medical Arts Bldg., Muskegon
Giese, Douglas H...305 Westgate Med. Twr., Muskegon
Gillard, James L..............1642 Peck St., Muskegon
Goltz, Martha H. (L).......................Montague
Grasman, Erwin......539 Pine Street, Kalamazoo 49007
Griffith, Robt. M.....966 W. Broadway, Muskegon Hts.
Hack, Donald W.......Medical Arts Center, Muskegon
Hanley, Wm. J............315 W. Clay Ave., Muskegon
Harris, W. Richard....1464 Montague Ave., Muskegon
Harryman, James E..........1200 Ransom St., Muskegon
Hartwell, Shattuck W...450 W. Western Ave., Muskegon
Harvey, John G. Klemm (R)............Mercy Hospital, Muskegon
Heeres, Dale W.............1832 Fifth Street, Muskegon
Heneveld, John (R)..................Brasstown, N.C.
Heneveld, Robt. G...........1470 Peck St., Muskegon
Hennessy, Mary E. (A)....1200 Ransom St., Muskegon
Herald, Osbie J.......950 W. Sherman, Muskegon 49441
Holly, Leland E. (L)....889 N. Second St., Muskegon
Holly, Leland E., II.......889 N. Second St., Muskegon
Holm, Leo H.........212 Medical Arts Ctr., Muskegon
Hornbeck, Wm. J.........1200 Ransom St., Muskegon
Huntley, Richard A...1704 W. Sherman Blvd., Muskegon
Jesson, Robt. M...........1200 Ransom St., Muskegon
Johnston, E. H...........889 N. Second St., Muskegon
Joistad, Arthur H., Jr.......889 N. Second St., Muskegon
Kane, Thos. J. (M)..............2086 Leimert Blvd., Oakland 2, California
Kay, Cecelia S...............1533 Peck St., Muskegon
Keilin, Marie (L)....Occidental Hotel, Muskegon 49443
Kerr, Howard J..............3054 Henry St., Muskegon
Kislov, Richard......1810 Ruddiman Ave., N. Muskegon
Kleaveland, Ingram J.......1670 Peck Street, Muskegon
Krenz, Marlin P...Hackley Union Bk. Bldg., Muskegon
Lange, Eugene W...337 N. Muskegon Blvd., Muskegon
Lauretti, Emil J.........Medical Arts Center, Muskegon
Lauretti, L. A................936 Second St., Muskegon
Laurin, Vilda S. (L)....Medical Arts Center, Muskegon
Le Fevre, Geo. L., Jr. (R)............726 Lake Dr., North Muskegon
Le Fevre, Wm. M. (L)....315 W. Clay St., Muskegon
Lemmen, Lloyd J.............1724 Peck St., Muskegon
Leonard, Mr. A. T. (A)....435 Whitehall Rd., Muskegon
Loder, Leonel L.......289 W. Western Ave., Muskegon
Lowry, Robt. A..................1470 Peck, Muskegon
Maire, Lewis E................1633 Peck St., Muskegon
Mandeville, C. B. (L)..............5311 N. Bristol, Tacoma, Washington
Maples, Douglas E...........1669 Peck St., Muskegon
Marrs, Jack Winton..........Med. Arts Bldg., Muskegon
McNair, John N.............936 Second St., Muskegon
Medema, Paul E...........1017 Sanford St., Muskegon
Meengs, Marvin B.........1725 Peck Street, Muskegon
Miller, Phillip L.............1755 Peck St., Muskegon
Mulder, Lambertus......Medical Arts Center, Muskegon
Oden, C. L. A. (L)....Medical Arts Center, Muskegon
Osland, Richard R.......889 N. Second St., Muskegon
Packer, Robert C.............4065 Stamford, Muskegon
Parsons, Frank W...206 Westgate Med. Twr., Muskegon
Paterson, Lester C...........1643 Peck St., Muskegon
Peterson, Wm. F.........1094 Jefferson St., Muskegon
Pettinga, Frank L.............1470 Peck St., Muskegon
Risk, Robt. D.............1160 Ransom St., Muskegon
Sanden, Howard V...........1643 Peck St., Muskegon
Scholle, Norbert W...204 Westgate Med. Twr., Muskegon
Shebesta, Emil M.......Medical Arts Center, Muskegon
Smith, Robert E.........Medical Arts Center, Muskegon
Steffee, William P................1810 Ruddiman Ave., North Muskegon
Stratton, Donald P...........889 Second St., Muskegon
Stubbart, F. James........2416 Peck St., Muskegon Hts.
Stuk, Ronald L. (R)
Swanson, Raymond E...........1315 Ruddiman Ave., No. Muskegon
Sweda, George P.....Health Dept., Co. Bldg., Muskegon
Swedenburg, Robt. D.......1470 Peck Street, Muskegon
Swenson, Leland L...........1706 Peck St., Muskegon
Tellman, H. Clay...............315 W. Clay, Muskegon
Thieme, Siegfried W. (L)..12213 Stafford St., Ravenna
Thornton, Eugene S. (L)........301 E. Circle Drive, N. Muskegon
Torrey, R. K. (M)..Westgate Medical Bldg., Muskegon
Toy, Chas. M.................1607 Pine St., Muskegon
Tyler, Wm. H................1435 Peck St., Muskegon
Vandervelde, C. A.............1470 Peck St., Muskegon
Vangelder, Wm. C.......Medical Arts Center, Muskegon
Voikos, Geo. A..............179 Strong Ave., Muskegon

Wagenaar, Edward H.........3054 Henry St., Muskegon
White, Warren G. Jr.........307 Westgate Med. Twr., Muskegon
Wiersma, Silas C. (A)....University Hospital, Ann Arbor
Wildgen, Bernard C.....Medical Arts Center, Muskegon
Wilke, Carl A. (R)..8581 Old Channel Trail, Montague
Williams, Dale L.............1692 Peck St., Muskegon
Williams, Edward V.....2501 Baker St., Muskegon Hts.
Wilson, B. David (A)..........15428 Archdale, Detroit
Wohlrabe, J. C.........Medical Arts Center, Muskegon
Young, Malcolm C.........1700 Clinton St., Muskegon

NEWAYGO COUNTY MEDICAL SOCIETY (166)

Decker, J. C...................52 Maple S.E., Grant
DeKryger, Maynard..........220 W. Pine St., Fremont
Deur, Theodore R...............52 Maple S.E., Grant
De Young, Jess..............111 W. Dayton, Fremont
Emerick, Robt. W..................Box 147, Fremont
Geerlings, Lambert J. (L)........194 N. Hillcrest Dr., Fremont
Klein, J. Paul ....P. O. Box 111, Fremont
Masters, Brooker L..........111 W. Dayton, Fremont
Moore, Hugh R. (L)........................Newaygo
O'Neill, John W. (R)..Dist. Hlth. Dept. 5, White Cloud
Painter, Robert..................52 Maple S.E., Grant
Paxton, Robt. E.................220 W. Pine, Fremont
Pedelty, Norman..............38 State Rd., Newaygo
Vanden Berg, Tunis............220 W. Pine, Fremont

NORTHERN MICHIGAN MEDICAL SOCIETY (170)

Allen, Robt. F...............Lockwood Hosp., Petoskey
Alm, Bernhard T.............418 Petoskey St., Petoskey
Blum, Benj. B...........1208 E. Mitchell St., Petoskey
Burns, Dean C.............215 Division St., Petoskey
Christie, Joseph..............204 W. State, Mancelona
Connaughton, P. J...............Burns Clinic, Petoskey
Conti, Jos. B.............924 E. Mitchell St., Petoskey
Conway, Wm. S...........910 E. Mitchell St., Petoskey
Dawson, William A.............Burns Clinic, Petoskey
Drake, Gerald.................511 Waukazoo, Petoskey
Elliott, Dean C.................Burns Clinic, Petoskey
Foster, Bradford S.............226 Park Ave., Petoskey
Frye, Sanders A.................Burns Clinic, Petoskey
Crate, Lawrence E.............112 Clinton, Charlevoix
Hegener, Aloysius J..........1020 Howard St., Petoskey
Homsi, Rateb...............802 S. Main St., Cheboygan
Kirk, Thomas R.............W. Sheridan Rd., Petoskey
Knecht, Richard A.............226 Park Ave., Petoskey
Kutcipal, R. A.............1018 Lindell Ave., Petoskey
Larson, Walter E.............456 S. Huron, Cheboygan
Lentini, Nicholas...............................Cheboygan
Lignell, John H.........R. 3, Division St., Charlevoix
Litzenburger, A. F...........411 Pearl St., Boyne City
Martin, Robt. G..................707 Bridge, Charlevoix
Mateskon, Victor S..............Sunset Blvd., Petoskey
Mayne, Frederick C. (L)......P.O. Box 387, Cheboygan
McCullough, W. L...........115 Clinton St., Petoskey
McEnroe, John E.......1005 E. Mitchell St., Petoskey
McKnight, Robt. D.............Lincoln Place, Petoskey
Mertz, Joanne E.................Resort Pike, Petoskey
Pearson, Robt. E.....611 Birchwood Ave., Traverse City
Postle, Jack R.............Arlington Heights, Petoskey
Rauch, Carl T...........420 Riverside Dr., Cheboygan
Reus, Leonard W.............226 Park Ave., Petoskey
Rodger, John R...................................Bellaire
Saltonstall, G. B. (L)......112 Clinton St., Charlevoix
Santinga, John T.....Crickettown Rd., Stony Point, N.Y.
Savory, John H...........................East Jordan
Schaefer, Joseph C.................528 W. Market St., Bluffton, Ind. 46714
Shanahan, Robt. E.......1015 Lindell Avenue, Petoskey
Sheets, John A...........929 Michigan, Petoskey 49770
Smith, James R...............901 Spruce St., Petoskey
Snide, Rollin F...........125 N. Main St., Cheboygan
Stringham, James R. (L)....225 Backus St., Cheboygan
Tanton, John H.................Burns Clinic, Petoskey
Taylor, Robert M.............Lincoln Place, Petoskey
Uhlich, Gustav A.............E. Mitchell Rd., Petoskey
Van Dellen, Jerrian..............Water St., East Jordan
Webster, Jean H...............200 Sunset St., Petoskey
Weburg, Kathryn D...............Burns Clinic, Petoskey
Zipf, Charles (A).......................250 E. Almeda, Santa Fe, New Mexico

OAKLAND COUNTY MEDICAL SOCIETY (174)

Abbott, Vernon C.........1405 Pontiac St. Bk., Pontiac
Adair, Robin...............800 S. Adams, Birmingham
Adams, Fredk. M.........800 S. Adams, Birmingham
Albert, Donald G.......3535 W. 13 Mile Rd., Royal Oak
Albrecht, Robt. W...2111 Cass Lake Rd., Keego Harbor
Alexander, Joseph B. (A)......2075 E. Fourteen Mile, Birmingham
Allen, Julian......4113 Telegraph Rd., Bloomfield Hills
Altshuler, Ira M. (L)....17600 W. 8 Mile, Southfield
Anaya, Jacinto M. (A)......Pontiac State Hosp., Pontiac
Andrakovich, F.........Pontiac State Hospital, Pontiac
Angammal, Nanjappachari .. Pontiac State Hosp., Pontiac
Arena, Joseph A., Jr...31815 Southfield Rd., Birmingham
Arnkoff, Harry.....................140 Illinois, Pontiac
Arons, Roy E................10151 Corning, Oak Park
Ashare, Raymond..............35 S. Johnson, Pontiac
Aulie, Hal G.......420 Washington Sq. Bld., Royal Oak
Awes, Lorraine E................35 S. Johnson, Pontiac
Axelrod, Robt. G...........3535 W. 13 Mile Rd. 305, Royal Oak 48072
Baier, Kurt................2186 Garland, Pontiac 19
Baker, Frederick A. (L)......248 Paseo Lobo South A, Green Valley, Ariz.
Bannow, Robt. J...........880 Woodward Ave., Pontiac
Barker, Chas. P.........214 Wabeek Bldg., Birmingham
Barker, Howard B. (L)....880 Woodward Ave., Pontiac
Barlow, Peter P.......31815 Southfield Rd., Birmingham
Barnes, Bradley T.......312 Maywood, Rochester 48063
Barnes, Donald J. (L)......20 Norwich, Pleasant Ridge
Barr, Norman L................965 Orchard Ridge Rd., Bloomfield Hills
Barrett, John L.......3535 W. 13 Mile Rd., Royal Oak
Barron, Robert A.....4256 Pontiac Trail, Orchard Lake
Barsch, Henry J...............17579 Murray Hill, Detroit
Bauer, Bruce D.....22643 Stephenson Hwy., Hazel Park
Bauer, Edward G.............101½ N. Saginaw, Pontiac
Bauer, Ernest W., Sr...........22643 Stephenson Hwy, Hazel Park
Bauer, Ernest W., Jr...........22643 Stephenson Hwy., Hazel Park
Bauer, Franz...............909 Woodward Ave., Pontiac
Baylis, Shelby M...............35 S. Johnson, Pontiac
Beattie, Willard G. (R)............2500 Sample Rd., Pompano Beach, Fla.
Beck, Otto O. (L)......308 Wabeek Bldg., Birmingham
Becker, Paul M.........1890 Southfield Rd., Birmingham
Belknap, Warren F.....1809 S Main St., Pleasant Ridge
Benoit, Merrill P.....Pontiac Mtr. Div., G.M.C., Pontiac
Berg, Richard M...........880 Woodward Ave., Pontiac
Berger, Chas. J.......17220 W. Eight Mi. Rd., Southfield
Berman, Bernard D.....1200 N. Telegraph Rd., Pontiac
Berman, Gilbert M...........22100 Coolidge, Oak Park
Beuker, John T...1100 N. Woodward Ave., Birmingham
Beyer, Hans A.............5675 Kolly Rd., Birmingham
Birkelo, Carl H.......4680 Dixie Hwy., Drayton Plains
Blakeney, James R...........17 Utica Road, Pontiac 11
Blanchard, Gerald E...G.M.C. Chev. Mtr. Div., Saginaw

Blue, Jane................19125 Hillcrest, Birmingham
Bockrath, Henry M. (A)..Pontiac State Hosp., Pontiac
Boesky, Malcolm D.............26789 Woodward Ave., Huntington Wds.
Boileau, Thornton L..2075 E. 14 Mile Rd., Birmingham
Bookmyer, Robt. M...31815 Southfield Rd., Birmingham
Boucher, Roman E...4200 N. Woodward Ave., Royal Oak
Bowers, Chas. L...........909 Woodward Ave., Pontiac
Brady, Neal C.......3535 W. 13 Mile Rd., Royal Oak
Brantley, Robt. E. (A)..31260 E. Rutland, Birmingham
Bronson, Wm. W.....28119 John R St., Madison Heights
Brown, Arnold L...............35 S. Johnson, Pontiac
Browne, Richard T. (A)....2013 Houstonia, Royal Oak
Bryan, Henry G...............22100 Coolidge, Oak Park
Bryan, John B.......4045 W. 13 Mile Rd., Royal Oak
Bryant, F. W.......201 Washington Sq. Pl., Royal Oak
Budd, Alexander S. Z.............3511 Lakecrest Dr., Bloomfield Hills
Beuhrig, Robert..................5790 M 15, Clarkston
Bullard, R. W., Jr.................5790 M 15, Clarkston
Bunto, William G.........7320 S. State Rd., Goodrich
Burger, John H.....31815 Southfield Rd., Birmingham
Burgess, Bruno............29250 Longview St., Warren
Burke, Chauncey G...........35 W. Huron St., Pontiac
Byberg, Robt. A...............3535 W. 13 Mile Rd., Royal Oak 48072
Cabrera, G. P.....420 Washington Sq. Pl., Royal Oak
Calhoun, Ethel T.......707 Lakeview Ave., Birmingham
Campbell, K. N...1465 Cedar Bend Dr., Bloomfield Hills
Campbell, Malcolm D. (R)....216 Washington Sq. Pl., Royal Oak
Carioni, Juan C. (A)..........Wm. Beaumont Hosp., Royal Oak 48072
Carlisle, Jos. D.........3535 W. 13 Mile Rd., Royal Oak
Carlson, Barbara F. (A)......St. Joseph Mercy Hosp., Pontiac
Carpenter, G. B., Jr.....622 N. Woodward, Birmingham
Carrow, Joyce M. (A)..........1469 Highmoor Way, Bloomfield Hills
Castedo, Nicanor F................126 Barrington Rd., Bloomfield Hills
Cefai, Anthony F...............35 S. Johnson, Pontiac
Cerkez, C. T....................35 S. Johnson, Pontiac
Chandler, Douglas....1890 Southfield Rd., Birmingham
Chandler, Jos. H...309 Northland Med. Bldg., Southfield
Cheng, James T. (A)............30 Molly Stark Dr., Morristown, New Jersey
Cherup, Nicholas........Pontiac General Hosp., Pontiac
Childers, Merle A...............320 Walnut, Rochester
Chisa, Neldagae..............26711 Woodward Ave., Huntington Wds.
Christensen, Willis L.........109 W. Eleven Mile Rd., Royal Oak
Clair, Alvin H...........US Army Hosp., Ft. McPherson, Atlanta, Ga.
Clarke, Harriet A...............130 Seminole, Pontiac
Cline, Alan L...........4299 Roseberry, Drayton Plains
Cobb, Thos. H...........880 Woodward Ave., Pontiac
Cohen, Jack J.............17226 Adrian Rd., Southfield
Cohen, Lewis....26602 Dundee Rd., Huntington Woods
Collins, Edward F...........35 W. Huron St., Pontiac
Condon, Frank J............2401 E. Fourth, Royal Oak
Connor, Edward D.....3856 S. Miller Way, Birmingham
Cooksey, Norton J.....3535 W. 13 Mile Rd., Royal Oak
Cooley, Roy V.............318 S. Blvd. West, Pontiac
Cooper, Edmond L...4200 N. Woodward Ave., Royal Oak
Cooper, Robt. S.....3027 N. Woodward Ave., Royal Oak
Corrigan, K. E., Ph.D. (A)..300 Warren Ct., Birmingham
Royal Oak
Coskey, Ralph J.............22100 Coolidge, Oak Park
Coucke, Henry O...1148 S. Woodward Ave., Royal Oak
Counts, Robert W...........302 Walnut St., Rochester
Crum, Roger E..................35 S. Johnson, Pontiac
Cudney, Ethan B. (L)..........35 S. Johnson, Pontiac
Cutler, Wm. M.........800 S. Adams Rd., Birmingham
Dahlgren, Carl W.....3023 Orchard Lake, Keego Harbor
Darling, C. G., Jr.........880 Woodward Ave., Pontiac
Darnley, James D.............26711 Woodward Ave., Huntington Wds.
Dayton, Richard C.....427 W. University Dr., Rochester
Deighton, Murray N.........23023 Orchard Lake Rd., Farmington
Delaney, Malcolm J...........23023 Orchard Lake Rd., Farmington
De Lawter, Hilbert H...3535 W. 13 Mile Rd., Royal Oak
Delevie, Jaap B...............640 Riker Bldg., Pontiac
Deutsch, Wm. L.........600 W. 11 Mile Rd., Royal Oak
De Vito, H. Louis..........3115 Angelus Dr., Pontiac
Dito, William R.........Pontiac General Hosp., Pontiac
Dobski, Edwin J.........909 Woodward Ave., Pontiac
Doerr, Louis E., Jr.....1413 S. Washington, Royal Oak
Donnelly, Wm. J.......2561 Elizabeth Lk. Rd., Pontiac
Dooley, William D...........35 S. Johnson St., Pontiac
Dorostkar, Massoud............3262 Greenfield, B. 10, Royal Oak 48072
Dorsey, John M., Jr...31815 Southfield Rd., Birmingham
Drew, Dale R.............909 Woodward Ave., Pontiac
Drogowski, Edward J.........320 Walnut St., Rochester
Duhamel, Peter A.........1055 Stellma Lane, Rochester
Dunlap, Gregg L.............2870 Orchard Lake Rd., Keego Harbor
Dunn, Lewis E.........3924 Twelve Mile Rd., Berkley
Durak, Gerald G.......7105 Sherwood Dr., Birmingham
Durocher, Normand E...........35 S. Johnson, Pontiac
Dustin, Robt. W.........1314 W. Lincoln, Birmingham
Ekelund, Clifford T. (L)......35 W. Huron St., Pontiac
Ekinci, Mehmet..........Pontiac State Hosp., Pontiac
Elder, Edward E., Jr...........1116 Voorheis, Pontiac
Endress, Z. F., Jr.................35 S. Johnson, Pontiac
Engel, John B. (R)......235 Linden Rd., Birmingham
Ensroth, Jack F.......1100 N. Woodward, Birmingham
Esslinger, John O...622 N. Woodward Ave., Birmingham
Evseeff, Geo. S.......3535 W. 13 Mile Rd., Royal Oak
Farah, Jalil............3525 Brookside, Bloomfield Hills
Fargher, Robert A.....660 South Boulevard E., Pontiac
Fidler, Wm. F.....1200 N. Telegraph Rd., Pontiac 48053
Fink, L. Jerome..............500 W. Huron St., Pontiac
Finkell, Lawrence J...15231 W. Seven Mile Rd., Detroit
Fishman, Gordon R. A.........25721 Coolidge, Oak Park
Fitzpatrick, F. J...............92 Spokane Dr., Pontiac
Flaharty, Wm. J.....25000 W. Ten Mile Rd., Southfield
Fleurquin, A. G...4415 Park Lane Ct., Bloomfield Hills
Flick, John R...........120 W. Second St., Royal Oak
Forest, Jean L...................546 W. Queen Lane, Philadelphia, Pa. 19144
Fox, Ralph M.........800 S. Adams Rd., Birmingham
Furlong, Harold A. (L)....35 S. Johnson Ave., Pontiac
Fushman, John A...4200 N. Woodward Ave., Royal Oak
Gaba, Howard B.......8245 Hendrie, Huntington Woods
Gaber, Ben......10831 W. Ten Mile Rd., Oak Park 37
Gadbaw, Jos. J.......23607 Farmington Rd., Farmington
Gaensbauer, F.....1965 N. Hammond Lake Rd., Pontiac
Gagliardi, R. A...........880 Woodward Ave., Pontiac
Galens, Gilbert J....31815 Southfield Rd., Birmingham
Galpin, Richard R.......525 Southfield Rd., Birmingham
Garber, Max J...23023 Orchard Lake Rd., Farmington
Gariepy, Bernard F...120 West 11 Mile Rd., Royal Oak
Garland, Donald M.........Pont. Motor, Glenwood Ave., Pontiac 48058
Gates, Edward M...............35 S. Johnson, Pontiac
Gates, Joann M.............65 Telegraph Rd., Pontiac
Gatley, Cleo R. (R)...............111 Oneida, Pontiac
Gatley, Leslie W...........445 W. Huron St., Pontiac
Gause, Richard C.....31815 Southfield Rd., Birmingham
Gayles, Carlos B. (A)........473 Kuhn, Pontiac 48057
Gehringer, Norman F...........880 Woodward, Pontiac
Geist, Edgar J., Jr.......1500 Walton Blvd., Rochester
Gell, James W.............35 S. Johnson Ave., Pontiac
Gelstein, Lazaro..........909 Woodward Ave., Pontiac
Gerls, Frank B. (L)........4425 Motorway Dr., Pontiac
Gibson, Wellington C.........206 E. Commerce, Milford
Gill, Matthew J.............1030 Riker Bldg., Pontiac
Glen, Harold..............26684 Grand River, Detroit
Goerner, Dorothy M. (A)....338 Pilgrim, Birmingham
Goldberg, Howard S.............24777 Greenfield Rd., Southfield 48075
Goldstein, Herbert..22100 Coolidge Hwy., Oak Park 37
Good, Wayne T.......3306 Auburn Rd., Auburn Heights
Goode, Norman J., Jr...2000 Second Ave., Detroit 48226
Gordon, Clayton H.............1099 N. Cranbrook Rd., Birmingham
Gradolph, Paul L...23338 Woodward Ave., Ferndale 20
Gray, Murray H...........22100 Coolidge, Oak Park 37
Grayson, Joseph R.............156 Palmer St., Pontiac

Green, J. Donald........217 Briggs Bldg., Birmingham
Green, Ralph S...........24100 Stratford, Oak Park 37
Green, Willard M...............35 S. Johnson, Pontiac
Grekin, Thos. D...............3535 W. 13 Mile Rd., Royal Oak 48072
Gustafson, Everette............35 S. Johnson, Pontiac
Gutterman, Meyer A...25085 Coolidge Hwy., Oak Park 37
Haanes, Merle A...........909 Woodward Ave., Pontiac
Hackett, Danl. J. (L)........782 Owego Dr., Pontiac
Hagman, George L. (L)......711 Rogue Valley Manor, Medford, Oregon
Hague, Gilbert W...739 Westview Rd., Bloomfield Hills
Halsted, Lee H...23023 Orchard Lake Rd., Farmington
Hambalgo, George J...26800 W. 13 Mile Rd., Franklin
Hamburger, Joel I.....20905 Greenfield Dr., Southfield
Hamilton, Quentin P.......20905 Greenfield, Southfield
Han, Maolin........3358 Auburn Rd., Auburn Heights
Harmon, Lewis G.....1775 E. 14 Mile Rd., Birmingham
Harrold, John A..............534 Franklin Rd., Pontiac
Harvey, Campbell (L)......P.O. Box 35, Orchard Lake
Hassberger, John B.............620 N. Woodward Ave., Birmingham
Hathaway, Wm. S................433½ Main, Rochester
Hayden, H. S., Ph.D. (A)..300 Warren Ct., Birmingham
Hecht, Manes S...26711 Woodward, Huntington Woods
Henderson, H. R.......33750 Freedom Rd., Farmington
Henderson, James E.......909 Woodward Ave., Pontiac
Henderson, Worth W...1307 S. Washington, Royal Oak
Hendren, Owen S...1408 Pontiac Bnk. Bldg., Pontiac 14
Hendricks, Frank R...21701 W. 11 Mile Rd., Southfield
Henry, Colonel R. (L)..125 W. Nine Mile Rd., Ferndale
Hensley, Chas. B.........248 S. Broadway, Lake Orion
Herman, Edward L........35 W. Huron St., 904 R. B., Pontiac 48058
Hermes, Charles R.....4680 Dixie Hwy., Drayton Plains
Heyboer, Donald J.....St. Joseph Mercy Hosp., Pontiac
Hoekman, Aben.....1740 Hamilton Dr., Rte. 3, Pontiac
Holmes, Keith M...............31815 Southfield Rd., Birmingham 48009
Holt, Willard, Jr.........Pontiac Gen. Hospital, Pontiac
Hopkins, Melvin, Jr.......900 Baldwin Ave., Pontiac 11
Hopkins, Wm. J...17000 W. Eight Mile Rd., Southfield
Howell, Lynn E...........909 Woodward Ave., Pontiac
Hoyt, Chas. N.......Pontiac State Hosp., Pontiac 48053
Hrushka, Myroslaw..........Pontiac State Hosp., Pontiac
Hsu, John J....................326 Riker Bldg., Pontiac
Hubert, John R.......880 Woodward Ave., Pontiac 14
Ignatius, Aram A...1915 E. Nine Mile Rd., Ferndale 20
Inchaustegui, H. (A)............Wm. Beaumont Hosp., Royal Oak 48072
Ingold, John A.........1080 Pilgrim, Birmingham 48009
Isaac, Herbert L.............909 Woodward Ave. 115, Pontiac 48053
Isgut, Robert D.....28477 Hoover Rd., Warren 48093
Jackson, Philip J.......23480 Church, Oak Park 48237
Jacobi, Rodman C...........91 S. Washington, Oxford
Jagnow, Nanette.........525 Southfield Rd., Birmingham
James, Robt. E., Jr.....2561 Elizabeth Lk. Rd., Pontiac
Jenkins, Henry L..................161 State St., Pontiac
Jennings, John A.....21701 W. 11 Mile Rd., Southfield
Johnson, Clare G.......909 S. Woodward Ave., Pontiac
Johnson, J. Frederic..............23760 N. Woodward, Pleasant Ridge
Johnson, Robert H.....444 W. University Ave., Rochester
Jones, Cyril D.............100 W. Hickory Grove Rd., Bloomfield Hills
Joyce, John A...........413 Woodward Ave., Rochester
Jury, Donald B.....1126 S. Woodward Ave., Royal Oak
Kadian, George.........20905 Greenfield Rd., Southfield
Kamm, Robert L.....240 Daines St., Birmingham 48009
Karakuc, Raymond J.............Wm. Beaumont Hosp., Royal Oak 48072
Karca, N. Naci......6846 Cooley Lake Rd., Union Lake
Katz, Austin M. (A)........Pontiac State Hosp., Pontiac
Katz, Sidney F..................17350 Dorset, Southfield
Kaufman, Jacob M...3340 Berkshire Drive, Birmingham
Kay, Sherman A.......1026 S. Washington, Royal Oak
Kazdan, Louis L...13801 W. Nine Mile Rd., Oak Park 37
Keeffe, Eugene J..................468 Williamsburg Rd., Birmingham
Keith, Kelly................751 Chestnut, Birmingham
Kemp, Felix J............880 Woodward Ave., Pontiac
Kendrick, H. F., Jr.............35 S. Johnson, Pontiac
Kennison, Warren S...........250 Martin, Birmingham
Kerr, Edwin C...........32749 Franklin Rd., Franklin
Ketchum, Jesse..26075 Woodward Ave., Huntington Wds.
Kettler, Hans J.......25160 Edgemont Rd., Southfield
Khodadadeh, B...4252 Orchard Lake Rd., Orchard Lake
Kinsley, George..........909 Woodward Ave., Pontiac
Klass, Arthur..........1026 S. Washington, Royal Oak
Klegman, Jerome H.........17000 W. Eight Mile Rd., Southfield
Klein, Marvin E...15421 W. 9 Mile Rd., Oak Park 48237
Klewicki, H. A.........22720 Woodward, Ferndale 20
Knights, Edwin M., Jr.....16001 9 Mile Rd., Southfield
Knox, Richard S.....325 Washington Sq. Pl., Royal Oak
Koehler, Wm. H.....3535 W. 13 Mile Rd., Royal Oak
Koltonow, Lawrence........304 Northland Med. Bldg., Southfield
Kornmesser, James G.........23023 Orchard Lake Rd., Farmington
Kozlow, Clifford S...1201 Brookwood, Birmingham 48009
Kozlow, L. Ange..........3535 W. Thirteen Mi. Rd., Royal Oak 48072
Kozonis, Michael C.......880 Woodward Ave., Pontiac
Kozora, Elmer J.......17650 W. 12 Mile Rd., Southfield
Krane, Mark........215 Ladd Rd., Walled Lake 48088
Kresge, Bruce A.........1500 Walton Blvd., Rochester
Kreiger, Norman N.............402 Union St., Milford
Krohn, Don R.....23023 Orchard Lake Rd., Farmington
Kuhel, Eli H...........24515 Southfield Rd., Southfield
Kuhn, Anne C.......4203 W. 13 Mile Rd., Royal Oak
Kuhn, Robt. E.........4203 W. 13 Mile Rd., Royal Oak
Kurnetz, Ruben....10831 W. Ten Mile Rd., Oak Park
Ladd, James E...........31815 Southfield, Birmingham
Lahti, Paul T.......3600 W. 13 Mile Rd., Royal Oak
Lambert, Alvin G.......3027 N. Woodward, Royal Oak
Lambie, John S. (L)......280 Aspen Rd., Birmingham
Lanard, Francis W.................31504 Sunset Dr., Birmingham 48010
Landers, James W.....1670 Keller Lane, Bloomfield Hills
Landry, Roy A.........Clarkston Prof. Center, Clarkston
Larson, Alvin R...........880 Woodward Ave., Pontiac
Laux, Phliip J., Jr.......3027 N. Woodward, Royal Oak
Leach, Chas. A., Jr.....525 Southfield Rd., Birmingham
Leahy, Etta Link (R).........1616 Wiltshire, Berkley
Leichtman, R. R..........5770 Ortonville Rd., Clarkston
Lessien, Bruce T.....4045 W. Thirteen Mile, Royal Oak
Levin, Murray B.....7046 Cathedral Dr., Birmingham
Levine, Bernard..25835 Parkwood Dr., Huntington Woods
Lewis, Sol M. (L)........541 W. Oakridge, Ferndale
Lichtwardt, Harry E...........3535 W. 13 Mile Rd., Royal Oak 48072
Lichtwardt, John R.............3535 W. 13 Mile Rd., Royal Oak 48072
Lievois, Edward G.....289 Westbourne Dr., Birmingham
Lilly, Richard J.........25336 Castlereigh, Farmington
Limia, Antonio G.........24360 Kenosha, Oak Park 37
Ling, T. W.........23607 Farmington Rd., Farmington
Linn, Herman J.......3601 W. 13 Mile Rd., Royal Oak
Longyear, Harold W...........3535 W. 13 Mile Rd., Royal Oak 48072
Lowell, James W...........2330 Fairway, Birmingham
Lowrey, Anthony J. (R)....8689 Golf Lane, Union Lake
Lupovitch, Aaron............24661 Kenosha, Oak Park
Lussos, A. S............2707 Bridle Rd., Bloomfield Hills
Lutes, Byron B.....1401 S. Washington Ave., Royal Oak
Lyons, Robt. T..................35 S. Johnson, Pontiac
Manz, Howard N...23023 Orchard Lake Rd., Farmington
Marcotte, Oliver J. (A)......25000 W. Ten Mile Rd., Southfield
Margulis, R. Ralph......31815 Southfield, Birmingham
Markley, John M.......655 Ridge Rd., Bloomfield Hills
Maroko, Simon W.......2416 Avondale, Pontiac 48053
Marra, John J..................35 S. Johnson, Pontiac
Marsa, Percy S...........785 Lapeer Rd., Lake Orion
Martin, Donald W...........Pontiac State Hosp., Pontiac
Martin, Francis A.............880 Woodward, Pontiac
Mason, Robt. J...618 N. Woodward Ave., Birmingham
Mathura, G. R...............212 Riker Bldg., Pontiac
Mayo, W. E. Barry..2338 N. Woodward Ave., Royal Oak
Mayor, Raymond L..............35 S. Johnson, Pontiac
McCain, French H...628 N. Woodward Ave., Birmingham
McCandliss, D. H..............35 S. Johnson, Pontiac

McConkie, James P.....2425 W. Lincoln Rd., Birmingham
McDonald, Robert J.........4200 N. Woodward Ave., Royal Oak
McElroy, Wm. J., Jr...4520 Robinwood, Royal Oak 48073
McEvoy, Francis J.......1715 Crooks Rd., Royal Oak
McHugh, James M.....20905 Greenfield Rd., Southfield
McInerney, Thos. S...........2026 Laurome, Royal Oak
McIntyre, Jack B...............625 Purdy, Birmingham
McLaughlin, J. H.....604 North Woodward, Birmingham
McNeill, Howard H. (L)......225 W. Hickory Grove, Bloomfield Hills
McPhee, Edward C.............909 Woodward, Pontiac
McWhirter, W. W...............302 Walnut, Rochester
Megler, Mihael A.......3710 S. Darlington, Birmingham
Mehas, Constantine P............1060 Trailwood Path, Birmingham
Mehrabian, Edw. E.............30671 Stephenson Hwy., Madison Heights
Meils, Richard K. (A)..Pontiac General Hosp., Pontiac
Meisner, Harry E.......24777 Greenfield Dr., Southfield
Menge, Michael S................31815 Southfield Rd., Birmingham 48009
Mercer, Frank A. (L) 3032 Morningview, Birmingham
Mevorah, Barukh L.........114 S. Lafayette, Royal Oak
Milgrom, Sidney....1229 S. Washington St., Royal Oak
Miller, Arthur C.....31723 Waltham Ct., Birmingham
Miller, Hazen L. (L)...........31815 Southfield Rd., Birmingham
Miller, Hubert............28554 Rivercrest, Southfield
Miller, Irving M...23023 Orchard Lake Rd., Farmington
Miller, Sidney..............800 S. Adams, Birmingham
Mimura, James T.........31815 Southfield, Birmingham
Moloney, James C...5851 Farmington Rd., Orchard Lake
Morin, Leonard A.........29929 Vernon Dr., Southfield
Mueller, Elmer J.........31815 Southfield, Birmingham
Mumby, Clinton J...............26789 Woodward Ave., Huntington Wds.
Munson, Harry L.......MacKenzie Clinic, Walled Lake
Murguz, Atalay M.........1625 E. Fourth St., Royal Oak
Murray, Kenneth W.............31815 Southfield Rd., Birmingham 48009
Musick, Gordon S.................31327 W. Rutland Birmingham 48009
Nalbandian, Robt. M...............5154 Nob Hill Ct., Bloomfield Hills
Nalepa, Eugene J.........880 Woodward Ave., Pontiac
Nanjappachari (A)....Pontiac St. Hosp., Pontiac 48053
Nathanson, Milton L.............20905 Greenfield Rd., Southfield 48075
Naz, John F. (A)......2826 Orange Grove, Waterford
Neiswander, Paul L...2585 Warwick Dr., Bloomfield Hills
Nessel, Jack H.................880 Woodward, Pontiac
Netzel, Robert J.....2700 Colonial Way, Bloomfield Hills
Newby, Burns G..........20905 Greenfield, Southfield
Newcomb, Arnold B...19834 Riverside Dr., Birmingham
Nichamin, Samuel J...20905 Greenfield Rd., Southfield
Nickerson, Ivey D.....6245 Golfview Dr., Birmingham
Niederluecke, D. C................35 S. Johnson, Pontiac
Nol, Edward A. (A)......Pontiac State Hospital, Pontiac
Nosanchuk, Jos. I................35 S. Johnson, Pontiac
Nunn, James W.............751 Chestnut, Birmingham
O'Donnell, C. H...23338 Woodward Ave., Ferndale 20
Oliphant, Wm. W.......785 N. Lapeer Rd., Lake Orion
Olsen, Richard E.........900 Woodward Ave., Pontiac
O'Neill, James A...............5790 M. 15, Clarkston
Ormond, John K. (L)....909 Woodward Ave., Pontiac
O'Sullivan, Girardin S.........26520 Willowgreen Way, Franklin
Ott, Harold A..........3019 N. Woodward, Royal Oak
Overy, Donald C.........880 Woodward Ave., Pontiac
Packard, David C...........5770 Highland Rd., Pontiac
Page, Oliver W., Jr..........500 W. Huron, Pontiac
Palmer, Hayden D. (L).......35 W. Huron St., Pontiac
Paragas, Pedro G., Jr. (A)..Pontiac State Hosp., Pontiac
Paris, S. William..23023 Orchard Lake Rd., Farmington
Patel, Vishnubhai U. (A)..Pontiac General Hosp., Pontiac
Patrick, Chas. I.......4721 Dixie Hwy., Drayton Plains
Patterson, J. C.......3535 W. 13 Mile Rd., Royal Oak
Pauli, Theodore H. (A)..880 Woodward Ave., Pontiac
Payton, Chas. F...........1719 Crooks Rd., Royal Oak
Pear, Erwin G.....3027 N. Woodward Ave., Royal Oak
Pearce, James F....3535 W. 13 Mile Rd., Royal Oak
Peirce, Wm. H.........800 S. Adams Rd., Birmingham
Pelletier, Chas. J.........1111 N. Campbell, Royal Oak
Pensavecchia, J. S................2680 Garland, Pontiac
Pfister, Richard C. (A)..............265 Wiswall Rd., Newton Center, Mass.
Pitonyak, A. D.......St. Joseph Mercy Hosp., Pontiac
Pool, Robert, Jr.........800 S. Adams Rd., Birmingham
Porter, Kenneth F.......2709 Bradway Blvd., Birmingham
Portnoy, Harold D.........445 W. Huron St., Pontiac
Ports, Preston W.......33108 Grand River, Farmington
Poznanski, Elva O.............26789 Woodward Ave., Huntington Wds.
Poznanski, W. A...1100 N. Woodward Ave., Birmingham
Pridmore, John S............2741 Onagon Trail, Pontiac
Proctor, Bruce..................3431 Baldwin, Pontiac
Quarton, Albert E., Jr.....542 Pilgrim Rd., Birmingham
Quigley, J. Patrick (A)....3229 Belle Court, Royal Oak
Quinn, James R., Jr...............2070 W. Valley Rd., Bloomfield Hills
Ragins, Abner I...........909 Woodward Ave., Pontiac
Ramirez, Joaquin J...........751 Chestnut, Birmingham
Ranney, Kenneth I.............3535 W. 13 Mile Rd., Royal Oak 48072
Raynale, George P. (L)..302 Wabeek Bldg., Birmingham
Read, James A.........610 N. Woodward, Birmingham
Rech, Wm. R...........MacKenzie Clinic, Walled Lake
Reid, Fred T. (R)..............18450 Riverside Dr., Birmingham 48009
Reid, Robert E...3535 W. 13 Mile Rd., Royal Oak 48072
Reilly, Richard C.........880 Woodward Ave., Pontiac
Relken, Richard C. (A)........St. Joseph Mercy Hosp., Pontiac 48053
Rendziperis, N. C.........118 W. Third St., Rochester
Reutter, Carolyn....17600 Northland Pk. Ct., Southfield
Richard, Robert E.........1719 Crooks Rd., Royal Oak
Richards, Wilson P....3500 W. Maple Rd., Birmingham
Richardson, Robt. P...26711 Woodward, Huntington Wds.
Riggs, Harry L..............149 Franklin Blvd., Pontiac
Riker, Aaron D. (L)..........640 Riker Bldg., Pontiac
Rivera, Eduardo................Wm. Beaumont Hosp., Royal Oak 48072
Roehm, Harold R.......319 Wabeek Bldg., Birmingham
Romanik, John H...31601 W. 13 Mile Rd., Farmington
Rossin, Herbert W.....20905 Greenfield Rd., Southfield
Roth, Herbert J. (M)..........31601 W. 13 Mile Rd., Farmington
Rowley, Laurie G. (L)............4400 Dixie Highway, Drayton Plains
Ruesink, Donald E.............127 Ferndale, Rochester
Rupp, Edson C., Jr.....3535 W. 13 Mile Rd., Royal Oak
Rush, Alva D., Jr...........391 Hamilton, Birmingham
Ruskin, David S.......20905 Greenfield Rd., Southfield
Russell, Vincent P...............3535 W. 13 Mile Rd., Royal Oak 48072
Rutzky, Julius........St. Joseph Mercy Hosp., Pontiac
Ruva, Jos. J...........4463 Dixie Hwy., Drayton Plains
Sadovsky, Vincent J.......880 Woodward Ave., Pontiac
Safavian, M. H. (A)....900 Woodward Ave., Pontiac 19
St. John, Harold A.......35 West Huron St., Pontiac 15
Salisbury, C. S...........21580 Greenfield, Oak Park 37
Samborski, Anne H.....32316 Grand River, Farmington
Sanford, Glenn A................35 S. Johnson, Pontiac
Sansone, Thos. J...........909 Woodward Ave., Pontiac
Satersmoen, Theodore............35 S. Johnson, Pontiac
Schaefer, Wm. C.............14001 Greenfield, Detroit
Schirle, Jos. L., Jr...........1116 Voorheis Rd., Pontiac
Schlecte, I. Carl (A)........P.O. Box 1187, Ann Arbor
Schmitt, Phillip E. (A)......V. A. Hospital, Dearborn
Schneider, Aaron....26505 John R St., Madison Heights
Schneyer, Jerome J...25000 W. Ten Mile Rd., Southfield
Schoenfeld, Robt. J.......800 S. Adams Rd., Birmingham
Scholes, Danl. R.................3535 W. 13 Mile Rd., Royal Oak 48072
Schreiner, Robt. J. (A)..16909 Dunblaine, Birmingham
Schrock, Marvin E.....35 S. Johnson St., Pontiac 48053
Schuneman, Howard A.........23760 Woodward Ave., Pleasant Ridge
Schwartz, David....33120 W. Twelve Mile, Farmington
Seaborn, Arthur J.............885 N. Woodward Ave., Birmingham 48011
Segula, Robt. L..................35 S. Johnson, Pontiac
Selman, Robert.............500 W. Huron St., Pontiac

Sempere, Chas. R..................35 S. Johnson, Pontiac
Sewell, Geo. R...411 West Ten Mile Rd., Pleasant Ridge
Shadley, Maxwell L..............94 Ottawa Dr., Pontiac
Shea, James Joseph.............35 S. Johnson, Pontiac
Sheffield, Loren C.............35 S. Johnson, Pontiac
Sheridan, F. Michael...........1307 S. Washington St., Royal Oak
Sherkat, Mehdi (A)
Siegel, Marvin D...........445 W. Huron St., Pontiac
Siffring, Loren W..........427 W. University, Rochester
Silberg, Joel J. (M)..................584 Martin Lane, Augusta, Ga. 30904
Silvani, John..............909 Woodward Ave., Pontiac
Silver, Marvin D............24308 Wash. Ct., Apt. 29, Farmington
Simpson, Edward K. (L)............2 Sunset Avenue, Chatham, Ont., Canada
Simpson, John R............800 S. Adams, Birmingham
Smith, Carleton A..........880 Woodward Ave., Pontiac
Smith, Donald S..............1010 Riker Bldg., Pontiac
Smith, Geo. E.......3535 W. 13 Mile Rd., Royal Oak
Somerville, Wm. J............3535 W. 13 Mile Rd. 308, Royal Oak 48072
Sosin, Allen......23023 Orchard Lake Rd., Farmington
Spademan, Loren C.....484 Warren Court, Birmingham
Spencer, Lloyd H...1219 S. Washington Ave., Royal Oak
Spoehr, Eugene L..............22832 Woodward Ave., Ferndale 20
Spohn, Earle W................324 Washington Sq. Pl., Royal Oak 48067
Stageman, John C.............909 Woodward, Pontiac
Stanisavljevic, S.......2338 Woodward Ave., Royal Oak
Stanley, Wm. F..........1148 S. Woodward, Royal Oak
Steffes, Everette M.....3345 Coolidge Highway, Berkley
Stern, Sheldon D..........802 Mutual Bldg., Detroit 26
Stolpman, A. K..........640 N. Woodward, Birmingham
Stolte, Jon L. (A)......995 N. Cass Lake Rd., Pontiac
Stone, John M. (A)..Wm. Beaumont Hospital, Royal Oak
Stremler, Bernard J.......1460 Chesterfield, Birmingham
Stuecheli, Milton B.....1084 Willow Lane, Birmingham
Sullivan, Paul M..........909 Woodward Ave., Pontiac
Sutton, Palmer E. (A)........222 Linden, Birmingham
Swickle, Edward F................17 S. Main, Clawson
Swingle, Norman E....2075 E. 14 Mile Rd., Birmingham
Szappanyos, Bela J...3325 Burning Bush Rd., Birmingham
Szybko, Valentine..........3535 W. Thirteen Mi. Rd., Royal Oak 48072
Tan, Elaine Hartje..367 Old Perch Rd., Rochester 48063
Tan, King L.......367 Old Perch Rd., Rochester 48063
Tarpinian, Dick A...3535 W. 13 Mile Rd., Royal Oak
Tauber, Abraham.............500 W. Huron St., Pontiac
Teshima, John Y.....22720 Woodward Ave., Ferndale 20
Tierney, Thomas D.....450 N. Woodward, Birmingham
Tongco, Rustico C.......414 E. First St., Gaylord 49735
Torgerson, Thos. S...........751 Chestnut, Birmingham
Touma, Alfred..26789 Woodward Ave., Huntington Wds.
Tregenza, Wm. K............20905 Greenfield, Southfield
Trumpour, Donald J...114 W. University Dr., Rochester
Tsiatalas, George......4045 W. 13 Mile Rd., Royal Oak
Tupper, Robert L.................86 Ottawa Dr., Pontiac
Ulgenalp, Attila O..........880 Woodward Ave., Pontiac
Ulveling, Robert A...........550 W. Huron St., Pontiac
Urwiller, K. L...........909 Woodward Ave., Pontiac
Van De Leuv, John H...91 S. Washington St., Oxford
Vanden Berg, Kenneth..........35 S. Johnson, Pontiac
Vander, Seymour A.............20905 Greenfield Rd., Southfield 48075
Vansickle, Robert L.........616 Sheffield Rd., Pontiac
Van Zoeren, Jay J................937 Rock Spring Rd., Bloomfield Hills
Varbedian, Thos. G....195 W. Brown St., Birmingham
Vaught, Richard K.......2009 Crooks Rd., Royal Oak
Veluswamy, V. P. (A)..Pontiac St. Hosp., Pontiac 48053
Victoria, M. A. (A)......2827 Voorheis, Pontiac 48054
Von Valtier, C. C. (A)....202 Walnut Blvd., Rochester
Von Valtier, Wm. F. (M)
Waehneldt, Niels R.............21730 Edna, Dearborn
Wagner, Ruth E. (L)..315 Ellen Avenue, Royal Oak
Wake, Douglas L..........1406 Woodsboro, Royal Oak
Walden, Robert E..........1 Lafayette St., Pontiac 48058
Wallace, Donald B.........880 Woodward Ave., Pontiac
Wallack, Erwin N...15660 W. Ten Mile Rd., Southfield
Wangner, William F.....1401 S. Washington, Royal Oak
Ward, W. Paul..3535 W. 13 Mile Rd., Royal Oak 48072
Warner, Fredk. H. O.............3400 Sashabaw Rd., Drayton Plains
Watson, Robert M. (M)..........402 Union St., Milford
Watson, Thos. Y.......640 N. Woodward, Birmingham
Watts, Fredric............Pontiac State Hosp., Pontiac
Weaver, Arthur (A)..................91 Depot Line, Karachi, West Pakistan
Weaver, William F.....33750 Freedom Rd., Farmington
Webber, Lynn F. (R)..461 Colonial Ct., Grosse Pte. 36
Wechsler, Norman........880 Woodward Ave., Pontiac
Wegrzyn, George C.......1380 Brookwood, Birmingham
Weintraub, G. S...........3535 W. 13 Mile Rd. 305, Royal Oak 48072
Weintraub, Rosalyn H.............6990 Holiday Drive, Birmingham 48101
Weisman, Lawrenee S...........909 East 12 Mile Rd., Madison Heights
Weiss, Morris..26339 Woodward Ave., Huntington Wds.
Wendling, Dieter....31815 Southfield Rd., Birmingham
Wessels, Robt. R.......302 Wabeek Bldg., Birmingham
Westfall, Edwin J.....3535 W. 13 Mile Rd., Royal Oak
Westmaas, Wm. J.........364 Roanoke St., Birmingham
White, R. Hamilton....384 Hamilton Ave., Birmingham
Wiant, John L...........258 Briggs Bldg., Birmingham
Wigent, Ralph D...........Pont. Motor, Glenwood Av., Pontiac 48058
Wilkinson, Wm. C.......880 Woodward Ave., Pontiac
Williams, John P...............35 S. Johnson, Pontiac
Willis, Maurice E................35 S. Johnson, Pontiac
Wisniewski, E. M.......950 E. Maple, Birmingham 48011
Wolfe, Warren E...............6290 Wing Lake Rd., Birmingham 48010
Wood, Warren A., Jr..................236 Fortress Ave., K. I. Sawyer A.F.B.
Woodward, Hanna L...........Pontiac General Hosp., Pontiac 48053
Woodward, Robert D.........1100 N. Woodward Ave., Birmingham
Yesko, Veldora C...............26075 Woodward Ave., Huntington Wds.
Ylvisaker, John R.........880 Woodward Ave., Pontiac
Young, Arthur R. (L)......35 W. Huron St., Pontiac 15
Zimmerman, Walter J...32340 Sylvan Lane, Birmingham
Zinterhofer, J. J., Jr...........27621 Santa Barbara Dr., Lathrup Village
Zografov, Nikolas S.......3648 Rockingham, Royal Oak
Zujko, Alphonse J.............606 Riker Bldg., Pontiac

OCEANA COUNTY MEDICAL SOCIETY (178)

Barker, V. D...................22 N. State St., Hart
Davis, Linford J.................22 N. State St., Hart
Hasty, Willis A.................405 State St., Shelby
Johnson, C. A.........................Box 6, New Era
Mullen, Warren R...........................Pentwater
Ratzlaff, Alvin J...................219 State St., Hart
Robinson, Wm. G. (A)............Memorial Hospital, Fatehgarh, U. P., India
Vrbanac, John J.................22 N. State St., Hart
Wood, Merle G..................19 Courtland St., Hart

ONTONAGON COUNTY MEDICAL SOCIETY (182)

Archibald, Donald H...............Box 223, Ontonagon
Beaghler, R. L.........Baraga Co. Mem. Hosp., L'Anse
Lahti, Carl R..........................R. 2, Ontonagon
Pierpont, John...................141 Maple, White Pine
Sayani, Ian........Lacroix Hospital, White Pine 49971
Strong, James P.......R. 1, Box 406, Ontonagon 49953
Strong, Wm. F.......103 W. Second Ave., Chico, Calif.

OTTAWA COUNTY MEDICAL SOCIETY (186)

Albers, Robt....................601 Michigan, Holland
Arendshorst, Wm.....601 Michigan Ave., Holland 49423
Beernink, Ernest H. (L)..430 Duncan Ct., Grand Haven
Bloemendaal, Dirk C........351 N. Main St., Zeeland
Bloemendal, W. B.....224 Washington St., Grand Haven
Boersma, Vernon L.............121 W. 24 St., Holland
Bonzelaar, Alvin..............144 West 26th, Holland
Boone, Cornelius E. (L)..22 E. Central Ave., Zeeland
Bulthuis, Jerry E...........................Jamestown
Chamness, James K.......121 W. 24th Street, Holland
Clark, Nelson H...............17 W. 10 St., Holland
Cook, Carl S.................121 W. 24th St., Holland
De Vries, Harold G.............30 E. 9th St., Holland
De Vries, Peter J.....214 Washington St., Grand Haven
De Witt, Donald E...........390 Fairhill Dr., Holland
De Young, Fredk. W.......................Spring Lake
Dood, Arnold R.............598 Central Ave., Holland
Dykstra, Jerome H.............601 Michigan, Holland
Endean, Donald H...........121 West 24th St., Holland
Frieswyk, Melvin J...........241 E. Main St., Zeeland
Gesink, Owen J.............492 Orchard Hill, Holland
Groat, Frank L.........631 Franklin St., Grand Haven
Hager, Ralph..............................Hudsonville
Hamelink, Marinus H.........700 W. 26th St., Holland
Harms, Herman P.............17 W. 10th St., Holland
Harvey, Dennis...............309 Terril, Grand Haven
Heard, Wm. (R)..........504 Park St., Grand Haven
Helbling, Edw. J., Jr.......17 W. 10th Street, Holland
Henderson, Jack A...1310 Wisconsin Ave., Grand Haven
Hommerson, H. J..................3559 M40, Hamilton
Kearney, Jos. B...............121 W 24 St., Holland
Kemme, Gerrit J...................R. No. 3, Zeeland
Kitchel, John H.........414 Franklin St., Grand Haven
Kitchel, Mary F. S........414 Franklin St., Grand Haven
Kools, Wm. C.................194 W. 11th St., Holland
Korpi, Steven..........520 Ottawa Ave., Grand Haven
Kuipers, Siebe W.................93 E 29th, Holland
Leppink, Richard A.............601 Michigan, Holland
Mahaney, Robert C...........65 W. 22nd St., Holland
McArthur, Peter A.......1310 Wisconsin, Grand Haven
Meeuwsen, Bernard............26 Sheldon Ave. S. E., Grand Rapids
Moerdyk, Wm. J.............120 W. 14th St., Holland
Nykamp, Russel R.............111 E. Main St., Zeeland
Post, J. Jay.................................Allendale
Rottschaefer, Wm...............601 Michigan, Holland
Rotz, Lloyd...........575 Robbins Rd., Grand Haven
Rypkema, Willard M..............22 South 2nd Street, Grand Haven
Schaftenaar, R. H.............86 E. 28th St., Holland
Schmidt, Frederick....6 Hancock, Ft. Leavenworth, Ks.
Smit, George J.......601 Michigan Ave., Holland 49423
Smit, Henry (A)............. c/o Dr. George Smit, 601 Michigan Ave., Holland 49423
Stobbelaar, Robt. H.......1310 Wisconsin, Grand Haven
Ten Have, Ralph..........1030 Orchard, Grand Haven
Ten Pas, Henry W...........293 W. 29th St., Holland
Timmerman, Eugene C....................Coopersville
Van Appledorn, C. J...........99 W. 23rd St., Holland
Vander Berg, Edwin E.........17 W. 10th St., Holland
Van Der Velde, Otto..........33 W. 8th St., Holland
Vande Waa, Alfred J.......152 E. Cherry St., Zeeland
Van Kolken, P. J...........509 Franklin, Grand Haven
Van Krimpen, Carl E.....601 Michigan Ave., Holland
Veenstra, Bernard M.....................Grand Haven
Ver Duin, John W.....223 Washington St., Grand Haven
Verkaik, Peter............................Hudsonville
Wang, Charles............14 East 25th Street, Holland
Wassink, Jerome H.................34 E. 33rd, Holland
Wells, Kenneth N.......119 W Savidge St., Spring Lake
Westrate, Warren K............17 W. 10th St., Holland
Westrate, Wm., Jr.............17 W. 10th St., Holland
Westrate, Wm., Sr. (L)   17 W. 10th St., Holland
Winter, John K..................726 State St., Holland
Winter, Wm. G., Jr.............630 State St., Holland
Yff, John H..............430 W. Lawrence, Zeeland
Yonkman, Fredk. F.......58 Pomeroy Rd., Madison, N.J.

SAGINAW COUNTY MEDICAL SOCIETY (190)

Ackerman, Gerald L.......124 S. Jefferson Ave., Saginaw
Albers, Millard J.......1227 N. Michigan Ave., Saginaw
Anderson, Wm. K. (L)....845 St. Andrews Rd., Saginaw
App, Robt. G................3422 Davenport, Saginaw
Averill, Walter G...............2110 Morson, Saginaw
Baleueua, Edgar P...........2 Chippewa Ct., Saginaw
Barry, Jack L.............5670 Dixie Hwy., Saginaw
Barry, Leroy C.........1600 N. Michigan Ave., Saginaw
Bass, Vernon V...............3322 Davenport, Saginaw
Behme, C. Peter...............5160 Helga Dr., Saginaw
Bellinger, Don H., D.D.S. (A).215 Garden Lane, Saginaw
Bertrand, Marc G.....1311 N. Michigan Ave., Saginaw
Bishop, Harry M..................705 Adams, Saginaw
Bitner, Leland M.............1811 N. Michigan Ave., Saginaw 48607
Bow, William A..............4987 State Street, Saginaw
Brender, Friedrich P....................Frankenmuth
Briggs, Gordon..........350 W. Washington, Hemlock
Bruggers, Laurence....1703 N. Michigan Ave., Saginaw
Buechle, George T.............175 E. Pinconning Dr., Pinconning 48650
Bullington, Bert M...........2000 Court St., Saginaw
Burnett, Quinter M.............4385 Concord, Saginaw
Busch, Frank J...........1731 N. Michigan St., Saginaw
Butler, Milton G.......1600 N. Michigan Ave., Saginaw
Cady, Donald J...............2002 Court St., Saginaw
Cady, Fredk. J., Jr......402 S Jefferson Ave., Saginaw
Cady, Fredk. J. (L).....402 S. Jefferson Ave., Saginaw
Cambridge, V. W........Potter at Jefferson, Saginaw
Cameron, Allan K.......1314 S. Jefferson Ave., Saginaw
Campbell, Lloyd A. (R)......335 Brockway Pl., Saginaw
Caumartin, Hugh T...1537 S. Washington Ave., Saginaw
Chisena, Peter R.................6221 Dixie, Bridgeport
Choate, Frances S...........1600 N. Michigan, Saginaw
Claytor, Archer A. (L)....603 N. 3rd Avenue, Saginaw
Cortopassi, Vital E.....324 S. Washington Ave., Saginaw
Cory, Chas. W............1227 N. Michigan, Saginaw
Cresswell, T. A............1236 N. Michigan, Saginaw
Cullen, Geo. (A)........2529 N. Clinton St., Saginaw
Curts, James H.........1205 N. Michigan Ave., Saginaw
Davenport, Clyde P.............2110 Morson, Saginaw
Derifield, R. S. (A)..........25 Bretton Ct., Saginaw
De Young, William A.........537 Millard St., Saginaw
Dowidat, Raymond W. (A)......608 Westfield, Saginaw
Durman, Donald C. (R)....1530 Ottawa Blvd., Saginaw
Ellis, George A.........16 E. Hannum Blvd., Saginaw
Ely, Cecil W..................1820 Janes Ave., Saginaw
Ernst, Arthur R. (R)....Fieldmont, The Plains, Virginia
Esparza, Higinio S.............537 Millard St., Saginaw
Farley, Albert W...........1013 N. Michigan, Saginaw
Feeheley, Robert D...............3521 State, Saginaw
Field, E. Malcolm..........1013 N. Michigan, Saginaw
Finger, John E...........29 Brian Scott Place, Saginaw
Fleschner, Thos. E..........................Birch Run
Forster, Kenneth J.............27 Benton Rd., Saginaw
Galsterer, Edwin C.......124 S. Jefferson Ave., Saginaw
Gamon, Adam E., II...........2004 Court St., Saginaw
Gardner, Joe H.........815 N. Michigan Ave., Saginaw
Gerard, Roy J................2419 Mackinaw, Saginaw
Gilmore, Robt. D.............234 W. Saginaw, Merrill
Goldner, Richard D.......1024 N. Michigan, Saginaw
Gomon, Louis D.......1203 N. Michigan Ave., Saginaw
Goodsell, John O...........1600 N. Michigan, Saginaw
Goodsell, J. Orton, D.D.S. (A)..1607 Gedar St., Saginaw
Goodwin, J. E...............515 S. Jefferson, Saginaw
Hand, Eugene A.........126 N. Franklin St., Saginaw
Harris, Geo. P.........1311 N. Michigan Ave., Saginaw
Harvie, Lloyd C. (L)..330 S. Washington Ave., Saginaw
Heavenrich, Robt. M.......1107 Gratiot Ave., Saginaw
Heilbronn, Duane B.........1703 N. Michigan, Saginaw
Heinmiller, E. G.......Saginaw Gen. Hospital, Saginaw
Helmkamp, Herbert O.........333 S. Jefferson, Saginaw
Hereza, Valeriano D...........2125 Bay Street, Saginaw
Hester, Eustace G.....2031 N. Michigan Ave., Saginaw

Hill, Victor, Jr.........1703 N. Michigan Ave., Saginaw
Hines, Ronald G...........St. Marys Hospital, Saginaw
Hoban, Sean J.........1232 N. Michigan Ave., Saginaw
Hubinger, H. L., D.D.S. (A)..501 2nd Natl. Bnk. Bldg., Saginaw
Hunt, Maurice E.................1941 Gates St., Reese
Hyslop, Wm. T.............1610 Gratiot Ave., Saginaw
Iizuka, Reiichi..................49 Davis Dr., Saginaw
Infante, A...................1931 E. Genesee, Saginaw
James, John W...........1021 W. Genesee St., Saginaw
Jardinico, Robert..............303 S. Grange, Saginaw
Jarvi, Rudolph M...........1107 Gratiot Ave., Saginaw
Johnson, G. T. (A)............V.A. Hospital, Saginaw
Johnstone, Kermit T...........1050 Fisher Dr., Saginaw
Jordan, Leo A...........1524 E. Genesee St., Saginaw
Kerr, Wm. B.............300 S. Michigan St., Saginaw
Keyes, James T...........10222 Maple Rd., Birch Run
Kickham, Edward F...........705 Adams St., Saginaw
Kleekamp, Herbert G. (R)..1776 S. Rogers Rd., Rt. 1, Clare 48617
Kleinschmidt, Earl E.........3625 Webber St., Saginaw
Kolesar, Robt. C.................1005 Gratiot, Saginaw
Koucky, Charles J..............1375 Coolidge, Saginaw
Kowals, Francis V.......Med. Dir. Chec. Ser. G.M.C., Saginaw
Kretschmer, Thos. V.....1232 N. Michigan Ave., Saginaw
Lassignal, Jules C.....1600 N. Michigan Ave., Saginaw
Ling, Kenneth C.............................Hemlock
Lohr, Oliver W. (L)............614 Madison, Saginaw
Lohr, Thos. O.........1135 N. Michigan Ave., Saginaw
Love, Neil W............505 W. Tuscola, Frankenmuth
Lurie, Robt. I.......2525 S. Washington Ave., Saginaw
Mahaney, Thos. P...........3521 State Street, Saginaw
Mankani, Hari B.....17084 Dawn Rd., Roseville 48066
Manning, John E.......815 N. Michigan Ave., Saginaw
Manning, John W., III...........705 Adams, Saginaw
Markey, Francis L.....1600 N. Michigan, Saginaw 48602
Markey, Jos. P.......1600 N. Michigan, Saginaw 48602
Martin, Jack F.........1011 N. Michigan Ave., Saginaw
Martzowka, Wm. P.......415 W. Genesee St., Saginaw
Mason, Wm. G.............1107 Gratiot Ave., Saginaw
Matthews, Harry C.....1227 N. Michigan Ave., Saginaw
Maurer, John................880 Kenton Dr., Saginaw
Mayne, Harold E...........2111 Marshall Ct., Saginaw
McEwen, Wm. G.............1502 Court St., Saginaw
Meyer, Henry J. (L)......6243 Dixie Hwy., Bridgeport
Mikan, V. Robert..........3900 Holland Rd., Saginaw
Miller, Glenn F.................2224 Mershon, Saginaw
Moon, A. Raymond (L)......705 Sunset Lane, Cadillac
Mooney, James C.....1600 N. Michigan Ave., Saginaw
Morgrette, Leonard J.........3424 Davenport, Saginaw
Mudd, Richard D. (R)........1001 Hoyt St., Saginaw
Mulhern, Donal T.......2716 S. Jefferson Ave., Saginaw
Murphy, Albert P.......303 N. Michigan Ave., Saginaw
Murphy, Richard T. (A)..1718 N. Michigan, Saginaw
Murray, Morris J.............3424 Davenport, Saginaw
Nelson, Oscar A.............3324 Davenport, Saginaw
Noble, Paul R.............1447 N. Harrison, Saginaw
Northway, Robt. O.....1811 N. Michigan, Saginaw 48602
Novy, Frank O. (L)....420 S. Jefferson Ave., Saginaw
Olson, Carl P. (A)..122 Morningside Dr., Battle Creek
Packer, James E.........2235 Whitemore Pl., Saginaw
Phillips, Homer A.....1600 N. Michigan, Saginaw 48602
Powers, Robt. F...........1600 N. Michigan, Saginaw
Prather, Perry E.........1227 N. Mich. Ave., Saginaw
Prinsell, Gustave G. (M)
Rank, J. Eugene........1107 Gratiot Avenue, Saginaw
Reichman, Jos. J...............1455 Sheffield, Saginaw
Reimers, Gerald F...........4046 Hess Street, Saginaw
Rice, William T.......1827 N. Michigan Ave., Saginaw
Richards, Ned W.............3518 State St., Saginaw
Richter, Harry J...............705 Adams St., Saginaw
Roggen, Ivan J.............1227 N. Michigan, Saginaw
Ruskin, Dave B...........1600 N. Michigan, Saginaw
Ryan, Richard S.....1315 S. Washington Ave., Saginaw
Sample, John T. (L)............602 Rust St., Saginaw
Sargent, Donald V.....1703 N. Michigan Ave., Saginaw
Schneider, A. J. N.......509 S. Jefferson Ave., Saginaw
Schultz, Frank R.........147 W. Broad St., Chesaning
Sharp, Martin C.....1803 N. Michigan Ave., Saginaw
Shek, John L...............803 N. Michigan, Saginaw
Sheldon, Suel A.............124 S. Jefferson, Saginaw
Sherman, John W.............403 S. Fayette, Saginaw
Skowronski, C. A.........1401 E. Genesee St., Saginaw
Slade, Homer G.......1520 N. Michigan Ave., Saginaw
Spengler, Donald E., D.D.S. (A)....4481 Bradford Dr., Saginaw
Stander, Aaron C.............1411 Court St., Saginaw
Stewart, Geo. W...............1902 Janes St., Saginaw
Sulfridge, Hugh L., Jr...1011 N. Michigan Ave., Saginaw
Taylor, Robert E...........1447 N. Harrison, Saginaw
Thompson, Arthur B.........2144 Ottawa St., Saginaw
Tiedke, Gunther E.......120 N. Michigan Ave., Saginaw
Toteff, Robert J.................2110 Morson, Saginaw
Tramitz, Melvin E...........711 Somerset Rd., Saginaw
Tuttle, Terence K.............1109 Court St., Saginaw
Underhill, Wm. G...............8 Five Oaks, Saginaw
Villegas, Alfonso A.......2111 Marshall Court, Saginaw
Vincent, John H...........1911 Seminole Lane, Saginaw
Vitu, Robert L...............703 W. Genesee, Saginaw
Volk, Vladimir K...Saginaw Co. Hosp., Box 65, Saginaw
Waite, Barry F.................403 S. Fayette, Saginaw
Walsh, Peter R...............59 Benton Rd., Saginaw
Webb, Walter L.............1502 Wadsworth, Saginaw
Weiss, Arno W.................3521 State St., Saginaw
Westlund, Norman............3253 Congress, Saginaw
Woomer, Donald F.....1227 N. Michigan Ave., Saginaw
Wright, Edwin M...........1311 N. Michigan, Saginaw
Yntema, Stuart..........331 S. Jefferson Ave., Saginaw
Young, John..................705 Cooper St., Saginaw

ST. CLAIR COUNTY MEDICAL SOCIETY (194)

Bailey, Robt. S............2425 Military St., Part Huron
Banting, Kenneth C...403 Peoples Bk. Bldg., Port Huron
Barss, J. A.................1209 Tenth St., Port Huron
Battley, John C. S...........1216 6th St., Port Huron
Beck, Frank K................2902 Military, Port Huron
Beer, Jos. F.........104 N. Riverside Ave., Saint Clair
Bennett, Wm. G.................210 S. Main St., Yale
Blatter, Erwin W.......3864 Gratiot Ave., Port Huron
Borden, Chas. L...........236 Huron Ave., Port Huron
Bottomley, Thos. H., Jr.......1102 Sixth St., Port Huron
Boughner, Walter H...........325 Pleasant St., Algonac
Bovee, Marion E. (L)......2208 Stone St., Port Huron
Bowden, Wm. S.........130 Washington, Marine City
Bridge, Ezra V...........416 Edison Blvd., Port Huron
Brush, Howard O. (L)..........3233 Elk, Port Huron
Burke, Colman J...411 Andrew Murphy Dr., Port Huron
Cantwell, John D., Jr.........2425 Military, Part Huron
Carrie, Robt. G. (A)..............5150 Windsor Dr., San Diego, Calif.
Chafty, Mahmoud...........2425 Military, Port Huron
Cleland, Wm. D., Jr.....Medical Arts Bldg., Port Huron
Clifford, Robt. P...........506 Riverside Dr., St. Clair
Clyne, Benj. C.................103 N. Main St., Yale
Collie, Ross J.............1209 Willow St., Port Huron
Coury, John J., Jr.........1209 Tenth St., Port Huron
Davison, Wm. T.........2425 Military St., Port Huron
Dinnen, Wm. J., Jr...........2425 Military, Port Huron
Douvas, Nicholas G.....1131 Erie St., Port Huron 48060
Dupuis, Jean Paul........1502 Shumaker, Port Huron
Escalera, Gustavo (A)..1605 Fred Moore Hwy., St. Clair
Fenton, Edwin H.............906 St. Clair River Rd., Algonac 48001
Fitzgerald, E. W., Jr.........1102 Sixth St., Port Huron
Franke, Armin T.............2425 Military, Port Huron
Fulton, Harold E., Jr.........2425 Military, Port Huron
Gerrits, James F...............St. Clair Clinic, St. Clair
Gholz, Anthony C.......Medical Arts Bldg., Port Huron
Gilmore, John R.....317 Mich. Bank Bldg., Port Huron
Gonzales, Carlos F.........1605 Division Rd., St. Glair
Hazledine, H. J.......4685 Lakeshore Rd., Port Huron
Hislop, David M. C.......3205 Belle Court, Royal Oak
Hlivko, Alexander E.......1605 Fred W. Moore Hwy., St. Clair
Hodgins, Thomas........3540 Lapeer Ave., Port Huron
Holcomb, Russell J.........140 S. Market, Marine City
Johnston, Thomas C.....2425 Military St., Port Huron

Kahn, Oscar B. .... Capac
Kirban, Harry N. .... 5500 Lakeshore Rd., Port Huron
Kirker, J. G. .... 1328 Michigan Ave., Marysville
Koch, Donald A. .... 2425 Military St., Port Huron
Kostoff, Harold R. .... 310 Water St., Port Huron
Lauridsen, James .... 621 River St., Port Huron
Le Galley, K. B. .... 1354 New Hampshire, Marysville
Licker, Reuben R. .... 2425 Military St., Port Huron
Ludwig, Claude A. .... 916 Seventh St., Port Huron
Ludwig, Fredk. E. .... 916 7th St., Port Huron
Lugg, Robt. M. .... 619 River St., Port Huron
Mayhew, Harry E. .... 8199 S. Riverside, Marine City
McColl, Duncan J. (L) .. 917 Prospect Place, Port Huron
McCormick, Harry .. Port Huron Gen. Hosp., Port Huron
Meza, Pedro ...... 1105 Sedgwick St., Port Huron 48060
Miller, John M. .... 1010 Griswold St., Port Huron
Mohney, Glenn E. .... 1131 Erie St., Port Huron 48060
Morris, Alvin N. .... 621 River St., Port Huron
Neruda, Fred .... Algonac
Novak, Walter S. .... 310 E. Water St., Port Huron
Patterson, Dorsey W. (L) .. 622 Huron Ave., Port Huron
Raftery, Michael .... 2425 Military, Port Huron
Rowe, Robt. E. .... 108 McMorran Blvd., Port Huron
Sanderson, Jos. L. .... 515 Pine St., Port Huron
Sands, Geo. E. (L) .... 2752 Military, Port Huron
Schaefer, Waldo A. .. 302 Mich. Bank Bldg., Port Huron
Selby, Clarence D. .... 1916 Military St., Port Huron
Serniak, John A. .... 104 S. Main St., Yale
Shoudy, Elmore D. .... 902 Tenth Ave., Port Huron
Sites, Edgar C. .... 1209 Tenth St., Port Huron
Snider, James J. .... 2425 Military, Port Huron
Tisdel, James H. .... 310 E. Water St., Port Huron
Tomsu, Glenn F. .... 310 E. Water St., Port Huron
Townley, Chas. O. .... 1209 Tenth St., Port Huron
Ulmer, Arthur H., Jr. .... 1209 Tenth St., Port Huron
Walker, Sidney C. .... 1209 Tenth St., Port Huron
Ware, J. Raleigh (R) ...... 3107 24th St., Port Huron
Wass, Henry C. .... 115 Adams, St. Clair
Weckesser, W. C. .... 1602 Military, Port Huron
Wilhelm, Daniel J. .... 619 River Street, Port Huron
Yost, Kenneth W. .... 1305 Gratiot, Marysville
Youngs, John A. .... 718 Griswold St., Port Huron
Yull, Arthur B. .... 1209 Tenth St., Port Huron

ST. JOSEPH COUNTY MEDICAL SOCIETY (198)

Berg, Lawrence A. .... 106 E. Chicago Rd., Sturgis
Bradley, D. E. .... 234 S. Main St., Colon
Braham, Wilbur G. .... 111 S. Monroe, Sturgis
Brothers, Paul L. .... 104 S. Lakeview, Sturgis
Brunson, Allen E. .... 206 E. West St., Sturgis
Dettman, Harold .... Maplecrest Plaza, Sturgis
Evans, Robt. H. .... 111 S. Monroe St., Sturgis
Fiegel, S. Albert .... 111 S. Monroe, Sturgis
Fortner, Roscoe J. .... 137 Portage Ave., Three Rivers
Gillespie, Eleanor M. .... R. 2, Sturgis
Hill, Robert V. .... 1500 Main North Bldg., Three Rivers
Jacobowitz, John M. .... Lincoln at Millard, Three Rivers
Lepard, Olin L. .... Knollwood Dr., R. 1, Sturgis
Miller, Chas. G. (L) ...... 106 W. Chicago St., Sturgis
O'Dell, Charles W. .... 117 Spring St., Three Rivers
O'Dell, John H., Jr. .... Three Rivers
Olney, Frank (L) .... Centerville
Pennington, Harry C. .... 118 S. Kalamazoo, White Pigeon
Penzotti, Stanley C. .... 117 Spring St., Three Rivers
Porter, Clark G. .... 226 East St., Three Rivers
Schimnoski, D. R. .... Three Rivers Med. Clnc., Three Rivers
Shaw, Geo. D. .... 117 Spring St., Three Rivers
Sheldon, John P. .... 206 E. West St., Sturgis
Smith, Robt. D. .... Colon
Storer, William R. .. St. Jos. Co. Health Dept., Centerville
Weisheit, H. R. .... Route 1, Sturgis
Zimont, Charles R. .... Constantine
Zimont, Raymond D. .... Constantine

SANILAC COUNTY MEDICAL SOCIETY (202)

Cripps, James R. .... Marlette
Ford, Frances A. (L) .. 2683 S. Lakeshore Rd., Applegate
Gift, Weldon A. (L) .... Marlette
Groat, Gerald .... Deckerville
Hart, Robt. K. (L) .... Croswell
Jayson, Michael H. .... 2764 Lorraine St., Marlette
McCrea, John W. .... Marlette
McGunegle, Keate T. .... Sandusky
Muir, Neil .... Croswell
Seager, M. Cole .... Brown City
Smith, Duane E. .... Brown City
Tweedie, G. Evans .... Sandusky
Tweedie, S. Martin .... Sandusky
Webster, J. C. (L) .... Marlette
Winfield, Raymond J. .... 3014 Main St., Marlette

SHIAWASSEE COUNTY MEDICAL SOCIETY (206)

Arnold, Alfred L., Jr. (L) .... R. 1, Ovid
Austin, Eugene S. .... 1260 Ada St., Owosso
Bach, Norman F. .... 113 E. Williams, Owosso
Brown, Richard C. .... 113 E. Williams St., Owosso
Brown, Richard J. (R) .... P.O. Box 1362, Ann Arbor
Buzzard, Walter D. .... Chesaning
Cameron, Richard R. .... 701 W. Oliver St., Owosso
Chipman, Elwood M. (R) .. 502 W. Williams St., Owosso
Clifford, Robert .... Matthews Bldg., Owosso
Foerster, Alfred W. .... 113 E. Williams St., Owosso
Ford, Wm. J. A., Jr. ...... 113 E. Williams St., Owosso
Forsyth, Henry T. .... 137 S. Saginaw St., Chesaning
Graves, James H. .... 511 W. Main St., Owosso
Gurden, Elizabeth A. L. .... 113 E. Williams St., Owosso
Harroun, John E. .... 105 N. Water St., Owosso
Harroun, R. V. .... 224 N. Ball St., Owosso
Hofstra, John .... Owosso
Hoshal, Verne L. .... 104 W. Clinton, Durand
Kennedy, John J. .... 1626 N. Chipman, Owosso
Lipsey, Donald .... Durand
MacGregor, John F. .... 113 E. Williams St., Owosso
McGeehan, J. S. .... Matthews Bldg., Owosso
McKnight, Edwin R. .... 320 N. Washington St., Owosso
Merz, Walter L. .... 307 N. Ball, Owosso
Moore, Phillip J. .... 221 E. North St., Owosso
Morin, Richard .... Durand
Morovitz, John E. .... 113 E. Williams, Owosso
Park, James H. .... 812 Bradley St., Owosso
Phillips, Rolland .... Matthews Bldg., Owosso
Richards, Chester J. .... 213 Mercer, Durand
Roty, Robert L. .... Matthews Bldg., Owosso
Sahlmark, Jos. F. .... 812 Bradley St., Owosso
Sauer, Peter .... 113 E. Williams, Owosso
Shepherd, Walter F. (R) .. 921 Coolidge Rd., Lansing 12
Trick, O. L. (A) .... Duke University, Durham, N. Carolina
Weinkauf, Wm. F. .... Corunna
Weston, Claude L. .... Matthews Bldg., Owosso
Wickstrom, Geo. B. .... 529 Clark Ave., Owosso

TUSCOLA COUNTY MEDICAL SOCIETY (210)

Anderson, Norma .... 206 Ellington, Caro
Ballard, James H. .... Cass City
Chapin, Maurice H. .... Millington
Cole, Versa V. .... Lock Box A, Caro
Dickerson, Willard W. .... Caro State Hosp., Caro
Donahoe, Harold T. .... 4674 Hill St., Cass City

Elmendorf, E. N., II............................Vassar
Flett, Richard O...........................Millington
Gugino, George J. (M).........1941 Gate St., Reese
Howlett, Robt. R...............624 W. Frank St., Caro
Kovacs, Geza................861 Gilford Road, Caro
Merrill, Elmer H.................506 Gilford Rd., Caro
Miles, Edward J..................................Caro
Nigg, Herbert L...................................Caro
Savage, Lloyd L. (L)......5208 Pt. Austin Rd., Caseville
Swanson, Ewald C...............220 N. Main, Vassar
Von Renner, Otto (L)......P.O. Box 396, Reese 48757

VAN BUREN COUNTY MEDICAL SOCIETY (214)

Boothby, Carl F...........................Hartford
Boothby, Fredk. M.........................Lawrence
Boothby, Paul.............................Lawrence
Bope, Wm. P. (L)..........................Decatur
Boyd, Wayne R..................Lake Cora, Paw Paw
Cooper, Jos. E.............417 W. Monroe St., Bangor
Davis, James M.............424 Huron St., South Haven
Diephuis, Bert............511 Huron St., South Haven
Dillon, Thos. J..................305 Oak St., Paw Paw
Gano, Avison..................417 Monroe St., Bangor
Genstler, Paul..............513 Upper Serangoon Rd., Singapore, Malaya
Groustra, Glenn R..................300 E. Henry, Saline
Itzen, John F...............P.O. Box 485, South Haven
Johnson, Harold C. A.
Kleber, John A...........365 Broadway, South Haven
Lawther, John..................P.O. Box 191, Hartford
Loomis, Frank J.............................Paw Paw
McManus, T. M...............Center Bldg., Paw Paw
Millard, David..............................Paw Paw
Morgan, Dale K.........403 Phoenix St., South Haven
Parks, Arthur E..............................Lawton
Spalding, R. W.................Box 187, Bloomingdale
Stagg, Adelbert L...........9 N. Maple St., Hartford
Stagg, G. Lee.........................Box 307, Hartford
Stagg, Ruth E. A....................Box 38, Hartford
Steele, Arthur H.............................Paw Paw
Sundin, Paul W...............................Decatur
Ten Houten, Charles.........................Paw Paw
Terwilliger, Edwin H.......P.O. Box 110, South Haven
Urist, Martin J.................R. D. 1, South Haven
Young, Wm. R. (L)............................Lawton

WASHTENAW COUNTY MEDICAL SOCIETY (218)

Alexander, Don K. (A)....712 Thomas Court, Ann Arbor
Alford, Barry H....................385 N. Mill, Plymouth
Allen, Arthur W..............5 Harvard Pl., Ann Arbor
Allen, Richard J. ......University Hospital, Ann Arbor
Anderson, David G.............2490 Adare, Ann Arbor
Anderson, Gerhard D. (A)......2929 Verle, Ann Arbor
Arabaci, Niara T...........507 Hill, Ann Arbor 48104
Atchison, Russell M.........501 W. Dunlap, Northville
Ause, Robert G..............1821 Sheridan, Ann Arbor
Badgley, Carl E. (L)....1313 E. Ann St., Ann Arbor
Bailey, Robt. W...........University Hosp., Ann Arbor
Baird, Walter M.......2558 Old Boston Ct., Ann Arbor
Bandera, Emily A...........P.O. Box 1047, Ann Arbor
Bandera, Jaroslav M.........4200 E. Huron River Dr., Ann Arbor
Banghart, Norman L...1950 Manchester Rd., Ann Arbor
Barker, Paul S. (R)........Box 87, Bonnots Mill, Mo.
Barlow, R. Craig..........326 N. Ingalls St., Ann Arbor
Barron, Walter L...........326 N. Ingalls, Ann Arbor
Barry, Alexander, Ph.D. (A)..Med. Sc. Bldg., U. of M., Ann Arbor
Barss, Wm. A.............525 W. Cross St., Ypsilanti
Bartholomew, Lee E.........4633 Kresge Bldg., U.M., Ann Arbor
Bass, Thos. J................201 S. Hamilton, Ypsilanti
Bassow, Paul H...........St. Joseph Hosp., Ann Arbor
Bauer, Gerhard H.....2015 Manchester Rd., Ann Arbor
Bauer, Jere M.............1313 E. Ann St., Ann Arbor
Beckett, Morley B.......207 Fletcher Ave., Ann Arbor
Behrman, Saml.............1313 E. Ann St., Ann Arbor
Beierwaltes, Wm. H...U. M. Medical Center, Ann Arbor
Beison, Richard A.........1795 W. Stadium, Ann Arbor
Bell, Margaret (L)...............1107 E. Adelaide Dr. Tucson, Arizona
Belser, Walter......2310 E. Stadium Blvd., Ann Arbor
Bender, Leonard F.......1313 E. Ann St., Ann Arbor
Benedek, Elissa P. (A)..........3607 Chatham Way, Ann Arbor 48105
Benson, Paul J., Jr.......221 N. Sheldon Rd., Plymouth
Benson, Ronald M. (A)........1053 Island Drive Ct., Ann Arbor
Bentley, Fredk. E...........851 S. Main St., Plymouth
Bicknell, John N.......703 First Natl. Bldg., Ann Arbor
Bishop, Ronald C.........1011 Lincoln Ave., Ann Arbor
Boblitt, Delbert E.........2112 Wallingford, Ann Arbor
Boles, Roger................4785 Lake Ct., Ann Arbor
Bookstein, Joseph J.........1034 Harper Dr., Ann Arbor
Borocz, Istvan....1782 B. Arlin. Vilg. Pl., Fairborn, Ohio
Bosch, Jan K...............302 W. Main St., Northville
Botch, Edmund S.....2310 E. Stadium Blvd., Ann Arbor
Botsford, James H..............109 N. Main St., Chelsea
Bourne, Charles W.....University Med. Ctr., Ann Arbor
Bradfield, R. John (A)...............267 Hamilton Ct., Grosse Pte. Farms
Brandl, Earl A...........General Mtrs. Corp., Ypsilanti
Brandt, Ralph L.............326 N. Ingalls, Ann Arbor
Breakey, Barry A.............2216 Medford, Ann Arbor
Brewer, Wilson K.....720 E. Catherine St., Ann Arbor
Briere, Russell O. (A).............4110 Southaven Rd., Richmond, Va. 23235
Britt, Eugene M., Ph.D. (A)........1411 Bardstown Tr,. Ann Arbor
Brody, Gerald L...........1207 Chapel Ct., Ann Arbor
Brovins, Walter G.......Ypsilanti State Hosp., Ypsilanti
Brown, Philip N...................R. 4, Milford 48042
Brown, Wm. E., III.......2101 Belmont Rd., Ann Arbor
Bryan, George C...............2547 Ellis Rd., Ypsilanti
Bryant, H. C...........425 E. Washington, Ann Arbor
Bucalo, Harry D., Jr.......2207 S. Seventh, Ann Arbor
Buchanan, Robert A.........2715 Brockman, Ann Arbor
Burke, Dennis R.............2991 Brassow Rd., Saline
Burton, Wm. D. (A)..University Med. Ctr., Ann Arbor
Bush, Jack L.........1950 Manchester Rd., Ann Arbor
Butler, Gerald E................5 Dover Ct., Ann Arbor
Cameron, George H.......2311 E. Stadium, Ann Arbor
Cameron, Hugh A.....425 E. Washington St., Ann Arbor
Campbell, Darrell A.........617 Stratford, Ann Arbor
Capili, A. M......................740 S. Emerick, Ypsilanti
Capili, E. Esquejo..........14 N. Hamilton St., Ypsilanti
Carbeck, Robt. B.............3080 Exmoor, Ann Arbor
Carr, Edward A., Jr.............M3622 Med. Science, Dept. of Pharmacology, Univ. of Mich., Ann Arbor
Carroll, Catherine............1130 Hill St., Ann Arbor
Carron, Dean P.........425 E. Washington, Ann Arbor
Carter, Thomas L. (A)........2131 Georgetown Blvd., Ann Arbor
Cassidy, James T...........618 Westwood, Ann Arbor
Cerny, Joseph C.......University Med. Ctr., Ann Arbor
Chatas, George J...........106 Pleasant Pl., Ann Arbor
Child, Chas. G., III.......University Hospital, Ann Arbor
Christopher, Robt. P...1500 Pauline, Apt. 48, Ann Arbor
Clague, Allan G.........1743 Waltham Dr., Ann Arbor
Clifford, Mary Ellen......University Hospital, Ann Arbor
Clyde, Ensign E...........1181 S. Main St., Plymouth
Cohan, Bruce E.....2355 E. Stadium Blvd., Ann Arbor
Conn, Jerome W.......200 Orchard Hill Dr., Ann Arbor
Corssen, Gunter............3490 Miller Rd., Ann Arbor
Courtney, Kenneth O...........2119 Melrose, Ann Arbor
Courtney, N. Warn (A)....2352 Fernwood, Ann Arbor
Crook, Clarence E...1050 Wall St., Apt. 10A, Ann Arbor
Cross, Thomas N.......Univ. Medical Center, Ann Arbor
Cummings, Howard H., (L) 1527 Packard St., Ann Arbor
Curtis, Arthur C...........1313 E. Ann St., Ann Arbor
Curtis, Edward G.....1825 W. Stadium Blvd., Ann Arbor

Davenport, Fred M.........1038 Martin Pl., Ann Arbor
Davey, Paula G...........2620 Whitewood, Ann Arbor
Davey, Winthrop N.......1405 E. Ann St., Ann Arbor
Deatrick, Richard W.....2940 Hickory Lane, Ann Arbor
Decaires, Percy F. R.........700 Avon Rd., Ann Arbor
De Jong, Russell N.......1313 E. Ann St., Ann Arbor
Dejonge, Bud R...............715 Plum St., Ann Arbor
Dekornfeld, Thom. J.....2581 Hawthorn Rd., Ann Arbor
Delong, Wm. B. (M)..U.S.A.F. Hosp., Tackikan A.P.O., San Francisco, Ca.
Demuth, George R...........Univ. Hospital, Ann Arbor
Den Houter, W. D.....225 N. Sheldon, Plymouth 48170
De Tar, John S. (L)..........55 W. Main St., Milan
Diaz Perez, Rodrigo..........2939 Renfrew, Ann Arbor
Didelius, Donald P. (A)........University Med. Ctr., Ann Arbor
Dieterich, Gordon C.......820 E. University, Ann Arbor
Dillman, Richard S...........1800 Baldwin, Ann Arbor
Dingman, Reed O...........221 N. Ingalls, Ann Arbor
Dodson, Vernon N...1638 University Hosp., Ann Arbor
Dolfin, Wilbur E.............2210 Melrose, Ann Arbor
Domino, Edward F...........3071 Exmoor, Ann Arbor
Douthat, Rudenz T.......213 S. Ann Arbor St., Saline
Driver, James R..............1230 Wines Dr., Ann Arbor
Dryer, Clyde K...............3033 Sophia St., Wayne
Dukay, Alexander P.........2075 Fort St., Lincoln Park
Edmunds, Wm. P.............21 S. Prospect, Ypsilanti
Edwards, Melvin L., Jr.........1521 Hatcher Crescent, Ann Arbor
Eliot, Johan W.........Sch. of Pub. Health, Ann Arbor
Elliott, Lyle D...............26 S. Prospect, Ypsilanti
Engelke, Otto K. (L)......313 Washtenaw Co., Bldg., Ann Arbor
Fajans, Stefan S.............248 Devonshire, Ann Arbor
Falk, Elwin C...............14 N. Hamilton, Ypsilanti
Falls, Harold F..........University Hosp., Ann Arbor
Farhat, Saeed M.........826 Starwick Dr., Ann Arbor
Favos, Juan V.......University Med. Center, Ann Arbor
Feller, Irving............2023 Devonshire, Ann Arbor
Fellman, S. L...........2216 Medford Rd., Ann Arbor
Ferrington, R. A...............519 W. Main St., Milan
Finch, Jay S.........51259 Murray Hill Dr., Plymouth
Finch, Stuart M.....Child Psychiatric Hosp., Ann Arbor
Fink, Geo. C.............411 N. Ingalls St., Ann Arbor
Fischmann, George....1321 Franklin Blvd., Ann Arbor
Fisher, Jos. V.................................Chelsea
Fisher, Robert J................1341 Jay Avenue, Ypsilanti
Foley, Arthur L., II.......2001 Brampton Ct., Ann Arbor
Forbes, John D. (A)....2041 Jackson Ave., Ann Arbor
Ford, Jack (A)..................519-A Hickory St., Shaw A.F.B., S. C. 29152
Fox, Winslow G.........715 N. University, Ann Arbor
Fralick, F. Bruce........University Hospital, Ann Arbor
Francis, Thos., Jr...U. Mich. Schl. Pub. Hlth., Ann Arbor
Fransway, Robt. L. (A)........2785 Park Ridge Dr., Ann Arbor
French, Arthur B.........1113 W. Liberty, Ann Arbor
French, A. James..........1313 E. Ann St., Ann Arbor
Frey, Charles F...........1412 Russell Rd., Ann Arbor
Frohlich, Moses M.........1313 E. Ann St., Ann Arbor
Frost, Lyle W.........309 N. Washington St., Ypsilanti
Frye, Carl M...............301 N. Ingalls, Ann Arbor
Furstenberg, A. C. (L)....1313 E. Ann St., Ann Arbor
Gabrielsen, T. O...........2341 Darrow Dr., Ann Arbor
Gamble, Robert N. (A)....608 Eberwhite, Ann Arbor
Garrison, D. Eugene............300 E. Henry, Saline
Gates, George A. (A)........University Med. Center, Ann Arbor
Gerigk, Paul F...............205 S. Davenport, Saline
Getting, Vlado A.........Sch. of Pub. Hlth., U. of M., Ann Arbor
Gignac, Ralph M...............32320 Michigan, Wayne
Gikas, Paul W...............V. A. Hospital, Ann Arbor
Ging, Rosalie J.......Veterans Adm. Hosp., Ann Arbor
Glenn, Edward A. (A).........3730 Corbridge Circle, Rockford, Ill. 61107
Glynn, Kevin P. (A)....604 S. Second St., Ann Arbor
Goldsmith, Robt. I...216 Mich. Theatre Bldg., Ann Arbor
Gosling, J. R. G.............315 Corrie Rd., Ann Arbor
Gottlieb, Joel D...........1800 Traver Rd., Ann Arbor
Gotz, Alexander........2201 Medford Rd., Ann Arbor
Gould, Stuart M., Jr.........Mercywood Hosp., Box 65, Ann Arbor
Grabb, William C.....325 Barton Shore Dr., Ann Arbor
Gracie, Wm. A., Jr.......2441 Shannondale, Ann Arbor
Graves, Wm. H., III.....1 Medford Circle, Ann Arbor
Gray, Jerry M. (A)............1931 Lyttonsville Rd., Silver Springs, Md.
Greene, James A., Jr...251 Orchard Hills Dr., Ann Arbor
Grillo, S. Phillip.............265 Main St., Belleville
Gros, Gerard................1025 Berkshire, Ann Arbor
Habel, Dan W. (M)..........Keesler A.F.B. Hospital, Keesler A.F.B., Miss.
Hagerman, Geo. W.......321 N. Ingalls St., Ann Arbor
Haig, Owen G. (A)....2803 Towner Blvd., Ann Arbor
Haight, Cameron..........1313 E. Ann St., Ann Arbor
Hammond, Walter W., Jr.........221 N. Sheldon Rd., Plymouth
Hampshire, John K. (A)..1018 Woodbridge, Ann Arbor
Handorf, Heinrich H.........Penniman Allen Theatre, Northville
Hankamp, Lamar J.........2119 Woodside, Ann Arbor
Hannum, Marvin R...............54 W. Main, Milan
Hanson, Frederick N.....34620 Fountain, Garden City
Harrell, E. R., Jr...........1313 E. Ann St., Ann Arbor
Harris, Bradley M.............27 S. Prospect, Yplisanti
Harris, Scott T...........44490 Clare Blvd., Plymouth
Hartman, Robt. T................519 W. Main, Milan
Henderson, John W.........University Hosp., Ann Arbor
Hendrix, Robt. C.........1139 Vesper Rd., Ann Arbor
Henry, L. Dell (L)......706 W. Huron St., Ann Arbor
Hickok, David K. (A)..871 B Birch Cr., Fort Devens, Ma.
Hicks, Samuel P...........112 Meadowbrook, Ann Arbor
Hildebrandt, H. Mark........1130 Hill St., Ann Arbor
Himler, Leonard E.....1225 Fairoaks Pkway, Ann Arbor
Hinerman, Dorin L.........1313 E. Ann St., Ann Arbor
Hing, Ng Harry....St. Joseph Mercy Hosp., Ann Arbor
Hiraga, Mikio H.........1795 W. Stadium, Ann Arbor
Hiss, Roland G. (A)....716 N. Maple Rd., Ann Arbor
Hodges, Fred J. (L)........5 Highland Ln., Ann Arbor
Holmes, Donald J.....505 Barton North Dr., Ann Arbor
Holt, John F..............1313 E. Ann St., Ann Arbor
Holtz, Fred.................326 N. Ingalls, Ann Arbor
Hoskins, Phillip A. (A)....824 Edgewood Pl., Ann Arbor
House, Frederic B.....1240 Crosby Crescent, Ann Arbor
Howard, Stacy C. (R)....3 Box 6571, Orlando, Florida
Howard, W. Leonard..........Maybury San., Northville
Howatt, William F.....University Hospital, Ann Arbor
Hubbard, Wm. N., Jr.........Univ. of Mich. Med. Sch., Ann Arbor
Huizenga, Philip B..................Box A, Ypsilanti
Hulett, Ralph M.......2881 Provincial Dr., Ann Arbor
Hyman, Saml. J..........27342 Michigan Ave., Inkster
Ideson, Robt. S., II.......122 N. Thayer St., Ann Arbor
Jacob, Jos. S.........202 E. Washington St., Ann Arbor
Jaffe, Burton (A)......1245 Creal Crescent, Ann Arbor
Jeffries, Frank W.
Jender, Joseph G.........1302 W. Maple St., Plymouth
Jimenez, B. (R)........215 A S. Main St., Ann Arbor
Johnson, Paul S. (A)....4007 Geddes Ave., Ann Arbor
Johnson, Robt. D.......3432 Woodlea Dr., Ann Arbor
Johnston, Franklin D.....1313 E. Ann St., Ann Arbor
Jones, David H. (A)..713 North Street, Smithfield, N.C.
Jones, Elizabeth.........Route 1, Box 206, Monroe, Va.
Joseph, Sydney......2311 E. Stadium Blvd., Ann Arbor
Judge, Richard D.....Univ. Medical Center, Ann Arbor
Julian, Mark D...............740 S. Emerick, Ypsilanti
Kabza, Theodore G...........326 N. Ingalls, Ann Arbor
Kahn, Edgar A.............500 Burson Pl., Ann Arbor
Kambly, Arnold H., Jr.....201 S. Main St., Ann Arbor
Kaufer, Herbert (M).............22 D. Shibe Terrace, Vineland, New Jersey
Kaump, Donald H.....2800 Plymouth Rd., Ann Arbor
Keese, Antonia J.........705 N. University, Ann Arbor
Kelley, Jack L. (A)..........1208 Prospect, Ann Arbor
Kelley, Paul A................326 N. Ingalls, Ann Arbor
Kemp, W. R., Jr...............8124 Main St., Dexter
Kemph, John P...............521 Hillspur, Ann Arbor
Kerlikowske, A. C.........1313 E. Ann St., Ann Arbor
Kern, James W...............620 Susan St., Ann Arbor
Kern, Wheeler H.....2011 Middlebelt Rd., Garden City
Kerry, Robert L............2695 Appleway, Ann Arbor
Kershul, Victor W...................Box A, Ypsilanti

Kheder, Jamil............44526 Clare Blvd., Plymouth
Kimbrough, Wm. W.........2402 Brockman, Ann Arbor
Kittleson, Arthur C.....2111 Devonshire Rd., Ann Arbor
Kivi, Louis P.........5950 W. Textile Rd., Saline 48176
Kline, David G. (A)......215 S. Eighth St., Ann Arbor
Knoll, Leo A. (R)..........2002 Scottwood, Ann Arbor
Koepke, Geo. H...........1313 E. Ann St., Ann Arbor
Konzen, Jon L. (A)..........7625 Second St., Dexter
Kooi, Kenneth A.........2132 Needham Rd., Ann Arbor
Korte, George J. (A)..........6546 Jonathon, Dearborn
Kraft, Richard O.....2355 E. Stadium Blvd., Ann Arbor
Krausse, Chas. F.................116 Park St., Chelsea
Krickstein, Herbert........643 Braeside Pl., Ann Arbor
Krigbaum, Edmund M...3075 Overridge Dr., Ann Arbor
Kumasaka, Glen H.........1411 Harbrooke, Ann Arbor
Kwass, Stephen K. (A)..1534 Saunders Cres., Ann Arbor
Lampe, Isadore............1313 E. Ann St., Ann Arbor
Lane, Alexander Z...5732 Pierson Rd., Fayetteville, N.Y.
Lapides, Jack..............1313 E. Ann St., Ann Arbor
Law, John L. (R)................1116 41st Ave. E., Seattle, Wa. 98102
Lease, Glenn O.........2800 Plymouth Rd., Ann Arbor
Ledger, Wm. J...........1418 Maxwell St., Ann Arbor
Lee, Fred..............1316 Glenleven Dr., Ann Arbor
Lindenauer, S. M.......1414 Argyle Crescent, Ann Arbor
Locken, Gail Ann....8255 W. Huron River Dr., Dexter
Lockett, Harold J.......319 Brookside Dr., Ann Arbor
Lovell, Robert G.........326 N. Ingalls St., Ann Arbor
Lowney, Edmund D.......1125 Ferdon Rd., Ann Arbor
Lowrey, Geo. H...........University Hosp., Ann Arbor
Lowry, Claud M.........1707 Shadford Rd., Ann Arbor
Lucas, Alexander R.....18471 Haggerty Rd., Northville
Magee, Kenneth R.........1313 E. Ann St., Ann Arbor
Magielski, John E.....2355 Londonderry Rd., Ann Arbor
Magnuson, Harold J...1634 Univ. Medical Ctr., Ann Arbor
Magoon, Duncan J. J..................Box A, Ypsilanti
Malcolm, Karl D.........311 N. Ingalls St., Ann Arbor
Maley, John E.........5441 Walsh Rd., Whitmore Lake
Mall, John C.................8747 Squires Lane N.E., Warren, Oh. 44484
Markham, Thomas N. (A)......2645 Scio Church Rd., Ann Arbor 48103
Marshall, Mark (L)......1803 South Blvd., Ann Arbor
Martel, William........2972 Parkridge, Ann Arbor 48103
Martin, Donald W.......19 W. Michigan Ave., Ypsilanti
Mason, Joyce W...........1908 Scottwood, Ann Arbor
Mason, Stephen C., III.....820 E. University, Ann Arbor
Mathews, Kenneth P.....1145 Aberdeen Dr., Ann Arbor
Maxwell, John A. (A)....2395 Yost Blvd., Ann Arbor
McCubbrey, David R.......21 N. Sheldon Rd., Plymouth
McDermott, J. F., Jr...........525 Hillspur, Ann Arbor
McEachern, Thos. H.........1130 Hill St., Ann Arbor
McLean, James A.........1313 E. Ann St., Ann Arbor
McPhee, Malcolm (A)......1245 Island Dr., Ann Arbor
McWilliams, John R.......201 S. Main St., Ann Arbor
Meadows, Joseph M., Jr..........2685 Overridge Dr., Ann Arbor
Meeks, Louis W. (A)............9 Lois Ct., Ann Arbor
Middleton, David H.........Univ. of Mich. Med. Ctr., Ann Arbor
Miedler, Leo J...............1005 Hutchins, Ann Arbor
Milford, A. F., Jr.........7 W. Michigan Ave., Ypsilanti
Miller, Ira I..........1718 Hermitage Rd., Ann Arbor
Miller, Norman F. (L)....R. 2, Box 390, Florence, Wi.
Morley, Geo. W...........University Hosp., Ann Arbor
Morris, Joe D............1313 E. Ann St., Ann Arbor
Moyyad, John...........740 S. Emerick St., Ypsilanti
Murray, Wm. A.........1705 Covington Dr., Ann Arbor
Nelson, Roger B...........1313 E. Ann St., Ann Arbor
Nesbit, Reed M...Univ. Med. Cen. 303 Hosp., Ann Arbor
Newton, Chas. W., Jr.........2310 E. Stadium Blvd., Ann Arbor
Nichols, Richard D. (A)......1822 Pontiac, Ann Arbor
Nixon, John C.......2144 Georgetown Blvd., Ann Arbor
Nobel, Rudolf E.............612 S. Forest., Ann Arbor
O'Connor, Gerald A...U. of M. Medical Ctr., Ann Arbor
O'Connor, Patricia....2120 Medford, Apt. 4, Ann Arbor
Ohmart, Bruce R. (M)....2150 Iroquois Ave., Detroit
O'Keefe, N. Thomas (M)............3016 Laredo Dr., Ft. Worth, Tx. 76116
Olariu, John.......................Box A, Ypsilanti
Olsen, William R.........6 Buckingham Ct., Ann Arbor
Olson, Nels R...........2950 Newport Rd., Ann Arbor
O'Neal, Robert M...........2110 Vinewood, Ann Arbor
Ostrander, L. D., Jr.....2793 Manchester Rd., Ann Arbor
Pahucki, Gena R...........317 S. State St., Ann Arbor
Palmer, Algernon A. (L)....110 E. Middle St., Chelsea
Papo, Michael..................19377 Sibley Road, Chelsea
Patterson, Wm. R. (A)..2851 Canterbury Rd., Ann Arbor
Payne, Beverly C.....425 E. Washington St., Ann Arbor
Pearson, Delbert E.......2274 Westaire Ct., Ann Arbor
Peller, Charles H. (A)..2849 Canterbury Rd., Ann Arbor
Perlman, Jack M.........2664 Antietam Ct., Ann Arbor
Peterson, Thomas R...2015 Manchester Rd., Ann Arbor
Petrohelos, Manousos A.....27 S. Prospect St., Ypsilanti
Petropoulos, Gust C...........1415 Roosevelt, Ypsilanti
Pfrender, Richard E.....1234 Creal Crescent, Ann Arbor
Pierce, Edward C.........1795 W. Stadium, Ann Arbor
Place, Edwin H.........2616 Hawthorn Rd., Ann Arbor
Pollard, H. Marvin....2012 Vinewood Blvd., Ann Arbor
Pollard, John C.............1706 Chandler, Ann Arbor
Postmus, Roger W.......662 Wembley Ct., Ann Arbor
Potter, Marcia L...........318 W. Cross St., Ypsilanti
Powsner, Rhoda M.........2200 Fuller Rd., Ann Arbor
Preuss, Lawrence..........916 Northwood, Ann Arbor
Proctor, Conrad A. (M)..........22 5th Artillery Rd., Ft. Leavenworth, Kansas
Prout, Gordon J.........113 N. Ann Arbor St., Saline
Purfield, Wm. P...........................Manchester
Quiroz, Hugo..........1414 Normandy St., Ann Arbor
Rae, James W., Jr.........1313 E. Ann St., Ann Arbor
Ransom, Henry K.......721 South Forest, Ann Arbor
Raphael, Theophile (L)..........430 Hillspur, Ann Arbor
Rapp, Robert..........1460 Cedar Bend Dr., Ann Arbor
Ratliff, Rigdon K............326 N. Ingalls St., Ann Arbor
Regan, Wm. J., Jr...........326 N. Ingalls, Ann Arbor
Rehner, Robt. C.......2378 E. Stadium Blvd., Ann Arbor
Reichert, Rudolph E., Jr.......1046 Baldwin, Ann Arbor
Reinhart, Melvin J.......1921 Hampton Ct., Ann Arbor
Rekshan, Wm. R.....425 E. Washington St., Ann Arbor
Riker, Donald D.............633 Archwood, Ann Arbor
Ritter, Frank N.........2230 Walter Drive., Ann Arbor
Robinson, Orlo J., Jr...........501 Dunlap, Northville
Robinson, Wm. D.........1405 E. Ann St., Ann Arbor
Ross, C. Howard (L)..........715 N. University Ave., Ann Arbor
Rotstein, Jack....2049 S.W. 44th Ave., Gainesville, Fl.
Rucknagel, Donald L.....1615 Saunders Cres., Ann Arbor
Russo, Sam F...........9551 Main St., Whitmore Lake
Sanchez, Hugo M. (A).........St. Joseph Mercy Hosp., Ann Arbor
Saunders, Allen......2361 E. Stadium Blvd., Ann Arbor
Sawyer, Howard J...7072 Edinborough Dr., Birmingham
Sayre, Geo. S.................27 S. Prospect, Ypsilanti
Schaefer, Donald L.........201 E. Liberty, Ann Arbor
Schlecte, Eve M. (A)......P.O. Box 1187, Ann Arbor
Schmidt, C. M...........941 Newport Rd., Ann Arbor
Schmidt, David W.........1512 Brooklyn St., Ann Arbor
Schneider, Richard C......1313 E. Ann St., Dept. N. S., Ann Arbor
Schoch, Henry K.......Vets. Admin. Hosp., Ann Arbor
Schultz, E. C., Jr.......22168 Camelot Dr., Birmingham
Schumacher, Wm. E.......201 S. Main St., Ann Arbor
Schunk, Herbert......425 E. Washington St., Ann Arbor
Sehwartz, Sheldon A. (A)......1121 Maiden Lane Ct., Ann Arbor
Seovill, Henry A...........1313 W. Cross St., Ypsilanti
Seevers, Maurice H...740 Spring Valley Dr., Ann Arbor
Segat, Maria Z.......455 Huntington Drive, Ann Arbor
Selzer, Melvin L.........1201 Red Oak Rd., Ann Arbor
Shadoan, James D. (A)....314 Washington St., Chelsea
Shammas, Jules...............2260 Prairie, Ann Arbor
Sharbrough, F. W., III. (M)........107 Bridget Ct., San Antonio, Tx.
Shearer, M. L., Jr.....8044 Dexter Pinckney Rd., Dexter
Shearer, M. R.............8044 Dexter Pinckney, Dexter
Sheldon, John M.........2121 Toumy Rd., Ann Arbor
Shelton, John C...............25 N. Adams, Ypsilanti
Sheperdigian, A. A.........9841 Hamburg Rd., Brighton
Shoecraft, Harriet L.....425 E. Washington, Ann Arbor
Sigler, Louis E., Jr.......1443 Covington Dr., Ann Arbor
Simpson, John F.......1723 Ivywood Drive, Ann Arbor
Simson, Laurence R. (A)......118 Maiden Lane Ct., Ann Arbor

Sirola, Olga..............1710 Collegewood, Ypsilanti
Sisson, James C.........2318 N. Circle Dr., Ann Arbor
Sitterley, Brooks H. (A).........1209 Roosevelt Blvd., Ypsilanti
Slee, Vergil N.............201 S. Main St., Ann Arbor
Sloan, David B., Jr. (A)....1517 Arborview, Ann Arbor
Sloan, J. Bernard (A)......USAF Hosp., Scott AFB, Il.
Smillie, John W...........1335 Fairlane Dr., Ann Arbor
Smith, Donald C...326 Victor Baughn Bldg., Ann Arbor
Smith, Edwin M...........1815 Arbordale, Ann Arbor
Smith, Eleanor........425 E. Washington St., Ann Arbor
Smith, Russell F.......9569 Main St., Whitmore Lake
Smith, William S.........C4202 University Med. Ctr., Ann Arbor
Sparling, Irene L. M. (L)..251 E. Main St., Northville
Spencer, Herbert H.....1206 Ardmore Ave., Ann Arbor
Starman, Marvin L. (A)........Madigan General Hosp., Tacoma, Washington
Stetten, Maynard L. (A)....Fl 3187121, 811 Med. Grp., Loring A.F.B., Maine
Steude, Georgine M.......1511 Northwood, Ann Arbor
Stimson, Cyrus W.......1706 Shadford Rd., Ann Arbor
Strang, Ruth H.....4500 E. Huron River Dr., Ann Arbor
Straschnov, Geo. J.........1678 Merriman Rd., Wayne
Struthers, James N. P...17617 Edinborough, Detroit 19
Stubbs, Bruce T.............315 S. Main St., Chelsea
Sweet, Robt. B...........1313 E. Ann St., Ann Arbor
Taylor, Fulton B.............1107 S. Harris, Ypsilanti
Taylor, Wm. B.............326 N. Ingalls, Ann Arbor
Teed, R. Wallace..............215 S. Main, Ann Arbor
Thieme, E. Thurston..St. Joseph Mercy Hosp., Ann Arbor
Thompson, A. S.......2432 Dorchester Rd., Ann Arbor
Thompson, George R.......1400 Traver St., Ann Arbor
Threatt, Barbara A. (A)....U. Hosp. Dept. Radiology, Ann Arbor
Tipton, John B.............2877 Burlington, Ann Arbor
Tiziani, Joseph J. (M)........1821 Ferdon, Ann Arbor
Tourtellotte, W. W.......University Hosp., Ann Arbor
Towsley, Harry A.............Dept. of Pg. Medicine, Univ. of Mich., Ann Arbor
Tupper, Chas. J...3408 Lakeview Dr., El Masaro, Calif.
Turcotte, J. G.......2292 Georgetown Blvd., Ann Arbor
VanBrocklin, J. D. (M)..................R. 6, Box 20, Chesapeake, Virginia
Van Duzen, Verne L. (L)............Box A, Ypsilanti
Van Reesema, F. S.......1608 Kirtland Dr., Ann Arbor
Vanselow, Neal A...........1532 Warwick, Ann Arbor
Votaw, May Louise K...2182 Yorktown Dr., Ann Arbor
Vreede, P. D.................1020 Ferdon, Ann Arbor
Waggoner, R. Walter......3333 Geddes Rd., Ann Arbor
Waggoner, R. W., Jr. (A)....1421 Barnard, Ann Arbor
Waldron, Alexander M.......309 N. Ingalls, Ann Arbor
Wallner, Julius M.........1313 E. Ann St., Ann Arbor
Watkins, Richard D.....2355 W. Delhi Rd., Ann Arbor
Watson, Ernest H.....University Med. Cen., Ann Arbor
Wegman, Myron E...University of Michigan, Ann Arbor
Weisman, Raoul L.........32 N. Washington, Ypsilanti
Weiss, Chas. F.................Box 1047, Ann Arbor
Weller, John M.......2508 Londonderry Rd., Ann Arbor
Westcott, Geo. W.......1515 S. Congress St., Ypsilanti
Westerberg, Martha R.......1313 E. Ann St., Ann Arbor
Westover, Chas. J...982 W. Ann Arbor Trail, Plymouth
Wetterstroem, Robt. G.........46376 W. 7 Mile Road, Northville
Whale, Edmund H.......207 Fletcher Ave., Ann Arbor
White, John D. (M)........Box 1601, U.S.A.F. Hosp., Keesler A.F.B., Ms.
Whitehouse, W. M.......1313 E. Ann Street, Ann Arbor
Whowell, Marianne......1805 Ivywood Dr., Ann Arbor
Wicht, Paul J.................27 S. Prospect, Ypsilanti
Williams, Howard R...1950 Manchester Rd., Ann Arbor
Williamson, Fredk. B...319 W. Michigan Ave., Ypsilanti
Willis, Park W., III.......University Hospital, Ann Arbor
Willson, J. Robert......Univ. Med. Center, Ann Arbor
Wilson, J. LeRoy..........1313 E. Ann St., Ann Arbor
Wilson, William S...........1321 Brooklyn, Ann Arbor
Winkler, James M.........3 Regent Court, Ann Arbor
Wischman, Charles L. (M)..........353 Fulton Street, Seattle, Wa. 98109
Wolfman, Earl F., Jr...............2928 N. El Macero, El Macero, Ca. 95616
Wolter, J. Reimer..University Med. Center, Ann Arbor
Woodburne, R. T. (A)..2023 Devonshire Rd., Ann Arbor
Woodruff, Calvin W...............1021 Lakeside Dr., Columbia, Missouri
Woods, Scott W...............27 S. Prospect, Ypsilanti
Work, Walter P.......University Med. Cent., Ann Arbor
Worth, Melissa H. C. (L)..R.F.D. 7, 3211 Packard Rd., Ann Arbor
Wright, Harold L...........18741 Haggerty, Northville
Wyman, John S.........2224 Highland Rd., Ann Arbor
Yoder, Orus R. (L)......700 Cambridge Rd., Ypsilanti
Zarafonetis, C. J. D...Simpson Memorial Inst., Ann Arbor
Zerbi, Victor M...............27 S. Prospect, Ypsilanti
Zrull, Joel P.................630 Dartmoor, Ann Arbor

WEXFORD-MISSAUKEE COUNTY MEDICAL SOCIETY (226)

Barnett, Robert F............Mercy Hospital, Cadillac
Bentley, M. D...................828 Oak St., Cadillac
Cannon, John P.........107½ N. Mitchell St., Cadillac
Cardinal, Thos. H.............212 S. Simons, Cadillac
Daugharty, Robt. V...........107 N. Mitchell, Cadillac
Inman, John C............................Lake City
Moon, Wm. W.................826 Oak St., Cadillac
Norton, R. C. (R)..........42 Brookside Pl., Northville
Pierce, Robert E.........1430 Sunnyside Dr., Cadillac
Posthuma, Millard................828 Oak St., Cadillac
Richmond, Thomas F............604 Lake Shore Dr., Cadillac 49601
Sanderson, James M...............512 Chapin, Cadillac
Seger, Dean W...........................Lake City
Tornberg, G. C. (R)....R. 1, Box 150, Cadillac 49601
Van Alst, Dennis E.......Medical Arts Group, Cadillac
Youngman, Douglas C.......................Marion

WAYNE COUNTY MEDICAL SOCIETY (222)

Abbott, James A.......1012 Kales Building, Detroit 26
Abbrecht, Martin M. (A)
Aben, Gerald J...........1075 Fisher Bldg., Detroit 2
Aboassaly, Michel........1059 Bedford, Grosse Pte. Pk.
Aboulafia, Elie D.........18241 Greenfield, Detroit 35
Abraham, Jos. P.......2799 W. Grand Blvd., Detroit 2
Aeosta, Julio B...............25447 Plymouth, Detroit
Adamian, Gerald D.......611 Kales Bldg., Detroit 26
Adams, James R...............3815 Pelham, Dearborn
Adams, Vincent B...19641 Mack Avenue, Grosse Pointe
Adamski, Arthur..............19666 Conant, Detroit 34
Adelson, Seymour S.....18400 Schaefer Rd., Detroit 35
Adelson, Sidney L.........16221 Schoolcraft, Detroit 27
Adler, Morton W...................2860 Clark, Detroit
Adler, Sidney..........3011 W. Grand Blvd., Detroit 2
Agnew, Geo. H.......3011 W. Grand Blvd., Detroit 2
Agnone, Eugene J.....1420 St. Antoine St., Detroit 26
Agnone, Peter M.......1420 St. Antoine St., Detroit 26
Aiuto, Jas. J.........660 Cadieux Rd., Grosse Pte. 30
Ajlouni, Issa S...........Chrysler Corporation, Detroit
Ajluni, Roger M...13345 W. McNichols Rd., Detroit 35
Akroyd, Cecil...........16551 W. Warren, Detroit 28
Alban, Emil J. Jr...........7940 Allen Rd., Allen Park
Albrecht, Albert J.............4407 Roemer, Dearborn
Alexander, Allen................18881 Hilton, Southfield
Alexander, Eugene J...........24140 Wilson, Dearborn
Alexander, G. D.........25799 Lathrup Blvd., Southfield
Alexander, L. C...........1204 Kales Bldg., Detroit 26
Alfonso, Manuel A.......20825 Mack, Grosse Pte. Wds.
Alford, Elvis S.................105 Main St., Belleville
Allaben, Robert D...18255 W. McNichols Rd., Detroit 19
Allen, John V.......1336 Southfield Rd., Lincoln Park
Allison, Herbert C. (L)........383 Fisher Rd., Detroit
Alpern, E. Bryce......2840 W. 7 Mile Rd., Detroit 21

Alpiner, Sam........2850 E. Seven Mile Rd., Detroit 34
Altman, Jules......14633 E. Seven Mile Rd., Detroit 5
Altman, Raphael....17000 West 8 Mile Rd., Southfield
Alvarez, Ana G....Detroit Memorial Hosp., Detroit 26
Alvarez, Hernan, Jr.......Henry Ford Hosp., Detroit 2
Alvarez, Julian..............260 Lakeland, Grosse Pointe
Alvey, Charles R..........1988 Northlawn, Birmingham
Anderson, Beverly L...........977 Sexton Rd., Howell
Anderson, Chas. P.......16100 Warwick, Detroit 48219
Anderson, Walter L.....1553 Woodward Ave., Detroit 26
Andreou, Byron......460 Eastland Ctr., Harper Woods
Annessa, Domenico M. (L)..3536 Burns Ave., Detroit 14
Ansley, Mary K. (A)........1300 Lafayette E., Detroit
Appelman, Howard B...1553 Woodward Ave., Detroit 26
Arcari, Frederico A.........771 Fisher Bldg., Detroit 2
Archambault, Henry A. (A)
Archambault, Rene F.....35550 Michigan Ave., Wayne
Arehart, Burke W...........340 Eastland Bldg., Detroit
Arends, Norman J...302 Eastland Prof. Bldg., Detroit 36
Arent, John G.......24251 W. McNichols Rd., Detroit
Aries, C. T.............10030 Cadieux Rd., Detroit 24
Arminski, Thos. C.........1066 Fisher Bldg., Detroit 2
Armstrong, Arthur G.....3001 W. Grand Blvd., Detroit 2
Armstrong, Mac J.................31115 Huntley Sq., Birmingham 48009
Arnkoff, Morris..........18241 Greenfield, Detroit 35
Arnold, Effie E. (L)........16520 Oakfield, Detroit 35
Arnold, Wm. J., Jr.............8203 12th St., Detroit 6
Arnoldi, Forrest J...........Harper Hospital, Detroit 1
Arrington, Robyn J.....7811 Oakland Ave., Detroit 11
Ascher, Meyer S...1508 Dav. Brodwick Twr., Detroit 26
Ashe, Stilson R. (L)..8031 W. Vernor Hwy., Detroit 9
Ashley, Lowell B. (R).............5811 N. E. 21 Rd., Ft. Lauderdale, Fla.
Asselin, Regis F.......20480 Eastwood Dr., Detroit 36
Atler, Lawrence R.............681 W. Forest, Detroit 1
Auble, Max E..............20905 Greenfield, Southfield
August, Harry E.........26339 Woodward, Royal Oak
Austin, Donald C.....320 Professional Bldg., Detroit 1
Austin, Shirley..........5224 St. Antoine St., Detroit 2
Ausum, John D.....28661 Lathrup Blvd., Lathrup Village
Avrin, Ira..................10821 Puritan, Detroit 38
Axelrod, Arnold R...15001 W. Eight Mile Rd., Detroit 35
Axelrod, Mildred A.........3535 W. 13 Mile Rd. 305, Royal Oak 48072
Babcock, Lloyd K. (L)........16420 Schoolcraft Ave., Detroit 27
Babcock, Myra E. (L)..7 Poplar Park, Pleasant Ridge
Babcock, Warren W. (R)........2661 Northeast Ninth, Pompano Beach, Fla.
Bach, Walter F. (L)..5419 Livernois Ave., Detroit 10
Bacher, Burton J...........1015 Kales Bldg., Detroit 26
Bachman, Morris E...10326 W. 7 Mile Rd., Detroit 21
Bacon, Vinton A. (L)......18400 Livernois, Detroit 21
Bader, Benj. H...........2654 W. Gd. Blvd., Detroit 8
Bady, Arthur J. (M)......832 Tac. Hosp., Box H147, Cannon A.F.B., Clovis, N. M.
Baeff, Michael A. (R)..15435 Stahelin Ave., Detroit 23
Baer, Geo. J..........1553 Woodward Ave., Detroit 26
Baer, Marga............16321 Mack Ave., Detroit 24
Baer, Walter............16321 Mack Ave., Detroit 24
Bagley, Harry E. (A)..7541 Oakman Blvd., Dearborn
Bahra, Robt. J..............20905 Greenfield, Southfield
Bailey, Louis J.........20905 Greenfield Rd., Southfield
Baima, Margaret A...1212 Dav. Whitney Bldg., Detroit 26
Baker, Clarence (L).............J 16 Palmetto Trl. Pk., Palmetto, Florida
Bakst, Joseph A. (L)........10 W. Warren, Detroit 1
Balaga, Frank T.........1840 Holbrook, Detroit 48212
Balberor, Harry......275 W. Grand Blvd., Detroit 16
Balcerski, Matthew A.......10 Peterboro St., Detroit 1
Balian, John V...........Henry Ford Hospital, Detroit
Ballard, Donald R...........20520 Audette, Dearborn
Balow, Ross M...........18700 Meyers Rd., Detroit 35
Balser, Chas. W. (L)........13931 Gratiot, Detroit 5
Baniriah, Nana N.............302 Eastland Med. Bldg., 17800 E. Eight Mile, Detroit
Banish, Gerald............23100 Cherry Hill, Dearborn
Banks, Thomas L.............18597 W. 10 Mile Rd., Southfield 48075
Barak, Lewis R.....7448 W. Seven Mile Rd., Detroit 21
Barak, Stuart...............18241 Greenfield, Detroit 35
Baran, Alphonse, W.....15841 W. Warren St., Detroit 28
Barbaglia, Louis C...........16378 Harper, Detroit 24
Barber, Radivoj R...........864 S. Main St., Plymouth
Bardenstein, M. B.....17000 W. 8 Mile Rd., Southfield
Barefield, Alwin S...10244 W. 7 Mile Rd., Detroit 48221
Barenholtz, Benj...........20905 Greenfield, Southfield
Barillas, Oscar G..................10 Peterboro, Detroit
Barker, David H...........7220 Gratiot Ave., Detroit 13
Barland, Oscar (A)..8401 Woodward Avenue, Detroit 2
Barlow, Myron.............18050 Mack, Grosse Pointe
Barnes, Van D. (R)....34970 Ann Arbor Trail, Livonia
Barnett, Louis L...........10 Witherell St., Detroit 26
Barnett, Morton......1527 David Stott Bldg., Detroit 26
Barnhardt, R. A...Ford Mtr. Company, Highland Park 3
Barone, C. Gerald....15231 W. 7 Mile Rd., Detroit 35
Barrett, C. D., Jr.....316 City County Bldg., Detroit 26
Barrett, Raymond J.........18280 Fairfield, Detroit 21
Barrett, Wyman D. (L)........1553 Woodward Ave., Detroit 26
Barron, James..........2535 Amberly Rd., Birmingham
Barron, Wm. H.............14938 Livernois, Detroit 38
Barsky, David................100 Oak St., Wyandotte
Bartolo, Anthony H...27459 Five Mile Rd., Livonia 48154
Barton, Jos. R..............19619 W. Warren, Detroit 28
Baruch, Robert J...........18737 Hilton Rd., Southfield
Basel, Arthur R. (A)..951 E. Lafayette St., Detroit 48207
Baskin, Sidney.............19630 W. McNichols, Detroit
Batchelor, Thomas M.........18060 Conant, Detroit 24
Bates, Gaylord S...........861 Monroe Blvd., Dearborn
Battle, John M.........6904 Charlesworth, Dearborn 6
Bauer, A. Robert..19268 Grand River Ave., Detroit 23
Bauer, Benedict J.........16451 Schoolcraft, Detroit 27
Bauer, Lester E.........4 Woodside Pk., Pleasant Ridge
Bauer, Ralph E.........Henry Ford Hospital, Detroit 2
Bauer, Raymond B.
Baugh, Evelyn F.
Baugh, Richard H.......24216 Michigan Ave., Dearborn
Baugh, Robert F................9191 Whittier, Detroit
Baumer, Moe.................10 Peterboro, Detroit 1
Baumgarten, Elden C. (L)......1062 Lochmoor Blvd., Gro. Pte. Woods 36
Baumgarten, Thos. W...20867 Mack Ave., Grosse Point 36
Baxter, Seymour............19925 Livernois, Detroit 21
Bayles, John G. (A)..14411 E. Jefferson, Detroit 48215
Bazil, Gilbert M...............14200 Puritan, Detroit
Beach, Watson........20825 Mack Avenue, Detroit 36
Beam, A. Duane....20160 Mack Ave., Grosse Pte Woods
Beamer, Geo. D.........14853 Michigan Ave., Dearborn
Beard, James E................23801 Fordson, Dearborn
Beauregard, Wm. L.........1201 Dav. Whitney Bldg., Detroit 26
Beck, Stanley M., Jr.........13118 Fort St., Wyandotte
Becker, Abraham..........10 Witherell St., Detroit 26
Beckett, Peter G. S.......951 E. Lafayette St., Detroit 7
Beckett, Victoria L. (A)..1420 Anita, Grosse Pte. Woods
Becklein, Clarence L...14351 E. Warren Ave., Detroit 15
Beckman, Hugh..........20001 Greenfield, Detroit 35
Beckwith, Carl C..............3340 Fenkell, Detroit 28
Bedell, Archie A...........15545 Mack Ave., Detroit 24
Bedwell, Wm. L...............711 Kales Bldg., Detroit
Beebe, Willard E.......14801 Southfield Rd., Allen Park
Beekhuis, G. Jan........1326 St. Antoine St., Detroit 7
Beeuwkes, L. E.......13014 Mackenzie Ave., Detroit 28
Behan, Robt. C.............1 Woodward Ave., Detroit
Beitman, Max R.............510 Kales Bldg., Detroit 26
Belanger, W. Geo.............1041 Harvard, Detroit 30
Belden, Darwin F.............2424 Puritan, Detroit 38
Bell, J. Kenner..........660 Woodward Ave., Detroit 26
Benavides, Claude....25750 W. Outer Dr., Lincoln Park
Bende, Sandor F.............15863 Garfield, Allen Park
Beninson, Joseph........Henry Ford Hospital, Detroit 2
Bennett, Germany E...........1446 E. Forest, Detroit
Bennett, Harry B.............17320 Livernois, Detroit
Bennett, H. Stanley........15101 Southfield, Allen Park
Bennett, James A...........8337 Esper, Detroit 48204
Bennett, Sanford A.........15301 W. Nine Mile Rd., Oak Park 37
Bennish, Arvin............14444 W. McNichols, Detroit
Bennish, E. Leo........14438 W. Six Mile Rd., Detroit
Benson, Clifford D.....1553 Woodward Ave., Detroit 26
Benson, Davis A...........17563 Greenfield, Detroit 35
Benson, Paul J.........227 N. Sheldon Rd., Plymouth

Benson, Virginia M. (L)........34636 Grove, Livonia
Bentley, Robert H.........7220 Gratiot Ave., Detroit 13
Bentley, Wm. G.............50 Westminster, Detroit 2
Berdayes, Pedro P...........15345 Windmill Pte. Dr., Grosse Pointe
Berger, Edwin L.........7301 Schaefer Rd., Dearborn
Bergman, Gary D. (M)......20001 Greenfield, Detroit
Bergman, Murray S.....4400 Livernois Ave., Detroit 10
Bergman, Theodore I.........7330 W. Seven Mile Rd., Detroit 21
Bergo, Howard L.......2730 Maybury Grand, Detroit 16
Berkas, Ernest M...............V.A. Hospital, Dearborn
Berke, Joseph J...........3333 E. Jefferson, Detroit 7
Berke, Sydney S...........3333 E. Jefferson, Detroit 7
Berlin, Allen B.........17000 W. 8 Mile Rd., Southfield
Berman, Charles............Highland Pk. Gen. Hosp., Highland Park 3
Berman, Lawrence..........1401 Rivard St., Detroit 1
Berman, Robt. H...........2111 Woodward, Detroit 1
Berman, Sidney L...........60 W. Hancock, Detroit 1
Bernard, Henri (A)....Detroit Receiving Hosp., Detroit
Bernard, Walter G...........910 Chalmer, Detroit 15
Bernbaum, Bernard (L)....17320 Livernois, Detroit 21
Bernstein, Saml. S.........18200 Wyoming, Detroit 21
Bernys, Conrad F...1317 Dav. Whitney Bldg., Detroit 26
Berridge, William L.......Chevrolet Motor Co., Livonia
Berry, Jos. E.........19242 W. 7 Mile Rd., Detroit 19
Bertram, Karl R.......2930 W. Grand Blvd., Detroit 2
Besancon, John H.....1510 Broderick Tower, Detroit 26
Best, Thos. H. E. (L)..9221 E. Jefferson Ave., Detroit 14
Betanzos, G.............11477 Twelve Mile Rd., Warren
Bialik, Michael H.......14853 Michigan Ave., Dearborn
Bicknell, Frank B...938 Dav. Whitney Bldg., Detroit 26
Bielawski, John G...5829 Golfview Dr., Dearborn Hgts.
Bigman, Oscar..........18400 Schaefer Rd., Detroit 35
Bihl, John H.........15800 W. McNichols, Detroit 35
Billingslea, Thos. H.....3790 Woodward, Detroit 48202
Bing, Richard J.............1401 Rivard St., Detroit 7
Binns, Philip M...........573 Fisher Bldg., Detroit 2
Birch, John R.........633 Dav. Whitney Bldg., Detroit
Birk, Robert E.........Henry Ford Hospital, Detroit 2
Birkam, Fred F...........7301 Schaefer Rd., Dearborn
Birkhill, F. Ross.........31 Shady Hollow Dr., Dearborn
Birmingham, D. J...........Wayne State Univ., Detroit
Birmingham, John R.........14215 W. McNichols Rd., Detroit 35
Birndorf, Leonard..........18317 John R St., Detroit 3
Bissell, G. W................V.A. Hospital, Dearborn
Bittker, Isadore I. (L)....3321 Rochester Rd., Royal Oak
Bittrich, Norbert M.........16001 9 Mile Rd., Southfield
Black, Earl D.....20867 Mack Avenue, Grosse Point 26
Black, Robert W.....817 Dav. Whitney Bldg., Detroit 26
Blain, Alexander, III.......2201 E. Jefferson, Detroit 7
Blain, Donald G.......841 Balfour Rd., Grosse Pte. Pk.
Blain, James H., Jr.......119 Kercheval Rd., Detroit 36
Blaine, Max..............13700 Woodward, Detroit 3
Blair, Wm. F................81 E. Kirby St., Detroit 2
Blanchard, Russell S.......12858 Woodward Ave., Detroit
Blanks, Douglas H.........3955 Fort St., Lincoln Park
Blass, Norman H...............1800 Tuxedo, Detroit 6
Blatt, Ronald W.......300 Cadillac Sq. Bldg., Detroit 26
Bleier, Alfred........13015 E. Warren Ave., Detroit 15
Blinkhorn, David H.............25709 Salem, Roseville
Block, Duane L.............3001 Miller Rd., Dearborn
Block, Melvin A.........2799 W. Grand Blvd., Detroit 2
Blodgett, James B.........76 W. Adams St., Detroit 26
Blodgett, Wm. H.........74 W. Adams Ave., Detroit 26
Blondy, Marshall J.....19009 W. 7 Mile Rd., Detroit 19
Bloom, Albert..............6484 Chene St., Detroit 11
Bloom, Arthur R...........19140 Gloucester, Detroit 3
Bloom, Victor..............951 E. Lafayette, Detroit 7
Bloomberg, Sanford............23023 Orchard Lk. Rd., Farmington 48024
Bluhm, Gilbert B.......Henry Ford Hospital, Detroit 2
Blum, George L...........18200 Wyoming, Detroit 21
Blumenthal, Frank S.............261 Brady, Detroit 1
Blumenthal, Franz L. (L)..2686 Heatherway, Ann Arbor
Blumer, Abraham..21415 W. Eight Mile Rd., Detroit 19
Boccaccio, John L...........11532 Morang, Detroit 24
Boccia, James J...........15761 E. Warren, Detroit 24
Boddie, Arthur W...........2737 Chene St., Detroit 7
Bogucki, Chester J.....18620 Walmer Lane, Birmingham
Bogue, Robt. E.....15800 W. McNichols Rd., Detroit 35
Bogusz, Ladislaus (R)...........29215 Maranya Rd., Homestead, Fla.
Bohn, Z. Stephen......327 Professional Bldg., Detroit 1
Bohne, A. Waite..........Henry Ford Hosp., Detroit 2
Boland, John R. (R)............Box 50, Grand Marais
Boles, Murray........26381 Dundalk Lane, Farmington
Bolstad, Donald S.........Henry Ford Hosp., Detroit 2
Bolter, Sidney........18946 W. McNichols, Detroit 19
Bolton, Norman........19321 Greenfield, Detroit 48235
Bolton, Russell P., Jr.......18530 Grand River, Detroit
Boman, Robert H.......12650 E. Outer Dr., Detroit 24
Bookstein, Abraham M.....1725 Pinecrest Dr., Ferndale
Boone, Geo. F.....81 Woodland Shores, Gro. Pte. Shores
Booth, Earnest............Womans Hospital, Detroit 1
Borchak, Robert G.........12408 Van Dyke, Detroit 34
Borden, Igor I..........15361 Plymouth Rd., Detroit 27
Borin, Maurice C.........18115 Fairfield St., Detroit 21
Bornstein, Sidney..............2033 Puritan, Detroit 3
Borrego, Jose M...........1342 Whittier, Grosse Pointe
Bott, Edmund T...............1629 Ford, Wyandotte
Botvinick, Isadore......13701 W. 7 Mile Rd., Detroit 35
Boutros, Nabil R.....15300 W. McNichols Rd., Detroit 35
Boutrous, Thos. A.....15801 W. McNichols, Detroit 35
Bower, Donald W.....8863 Woodside, Grosse Isle 48138
Bowers, Leo J.......11200 E. McNichols Rd., Detroit 34
Bowersox, LeRoy W...765 Balfour Rd., Grosse Pte. Pk.
Bowlby, James R.......15420 Farmington Rd., Livonia
Bownes, Eugene A.......18520 Grand River, Detroit 23
Boyajian, Albert..............10963 Farmington, Livonia
Boyce, Charles R...3790 Woodward Ave., Detroit 48201
Boyd, Albert L.................9845 Reeck, Allen Park
Boyd, John H.............2615 W. Jefferson, Trenton
Boyle, Albert J.........Wayne St. University, Detroit 2
Boyle, Eugene H.................572 Thorn Tree Rd., Grosse Pte. Wds.
Bracken, Andrew H...........5460 Schaeffer, Dearborn
Braden, Robt. G.............2300 Oak St., Wyandotte
Bradfield, Horace F.....3008 E. Grand Blvd., Detroit 2
Bradley, Geo. T.......1553 Woodward Ave., Detroit 26
Braley, Wm. N. (L)........12897 Woodward, Detroit 3
Bramigk, Fritz W. (L)....178 Lakewood, Detroit 48215
Brand, Benj...............4500 Wabash Ave., Detroit 8
Braun, Lionel......15121 W. McNichols Rd., Detroit 35
Braun, Robert A.......18610 Hartwell Ave., Detroit 35
Braverman, Morris M.............20905 Greenfield Rd., Southfield 35
Bredau, Frank N...........24781 Five Mile Rd., Detroit
Breiner, Sander J...14300 W. McNichols Rd., Detroit 21
Brekke, Viola G.......369 Glendale St., Highland Park 3
Bremer, John P...........17818 E. Warren, Detroit 24
Bremer, Wm. M...........15641 E. Warren, Detroit 24
Breneman, Gerald M...........28300 Forest Brook Dr., Farmington
Brennan, Louis G. (A)............6774 N. Pershing, Stockton, Ca. 95207
Brennan, Michael J.....1168 Three Mile Dr., Grosse Pte.
Brent, Morris S.........1330 Strathcona Dr., Detroit 3
Bresnahan, Boyd K...15800 W. McNichols Rd., Detroit 35
Brey, Norman W...1900 Dav. Broderick Twr., Detroit 26
Brickman, Murray......673 Fisher Bldg., Detroit 48202
Briegel, Walter A. (R)..........3233 N. E. 34th St., Ft. Lauderdale, Fla.
Briggs, Wm. J.....1900 Dav. Broderick Twr., Detroit 26
Bringard, Elmer L.........20905 Greenfield, Southfield
Brinkman, G. L.......Henry Ford Hospital, Detroit 26
Briski, Jacob E.......1058 Blairmoor, Grosse Pte. Wds.
Brisson, John E...........14801 Southfield, Allen Park
Brisson, Jos. C. (R)....23112 Westbury, St. Clair Shrs.
Bristol, Wm. R...............189 Claverly, Detroit 36
Broadman, Sylvan A.......25705 Middlebelt, Farmington
Brock, Donald R.........36475 Five Mile Rd., Livonia
Broderson, Harvey S. (R)..........10720 W. Jefferson, River Rouge 18
Bromme, Wm. (L)........10 Peterboro St., Detroit 1
Brooks, Chas. W., II...2033 E. Davison St., Detroit 12
Brooks, Eugene M...609 Northland Med. Bldg., Southfield
Brooks, Nathan................7401 3rd St., Detroit 2
Brosius, Chas. O.......15800 Six Mile Road, Detroit 35

Biosius, Wm. L. (L)..1823 Fair Oak Court, Rochester
Browell, J. N., Jr. (A)....Henry Ford Hospital, Detroit
Brown, Andrew G............20905 Greenfield, Southfield
Brown, Audrey O. (L)..........1795 Cedar Hill Dr., Birmingham
Brown, Carlton F...16552 Westmoreland Rd., Detroit 19
Brown, Chas. H..............2387 Fort St., Wyandotte
Brown, Donald......Henry Ford Hospital, Detroit 48202
Brown, Eli M.......13123 La Salle, Huntington Woods
Brown, Frances (L)........1940 Lincolnshire, Detroit 3
Brown, Gordon T.........13000 Hayes Ave., Detroit 5
Brown, John R.....1145 Dav. Whitney Bldg., Detroit 26
Brown, Kenneth A.......13300 Livernois, Detroit 48238
Brown, Oscar A.....1633 Dav. Whitney Bldg., Detroit 26
Brown, Robt. A.....22623 West River, Grosse Ile 48138
Brown, Saml. M..............21821 Harding, Oak Park
Brown, Saul........6890 White Pine Dr., Birmingham
Brown, Stanley H. (L)..8544 W. McNichols, Detroit 21
Brown, Thos. A.....5430 W. Warren Ave., Detroit 10
Brownell, H. H........8222 Woodcrest Dr., Grosse Ile
Brownell, Paul G.......18916 Woodward Ave., Detroit 3
Bruce, Thomas A.........19540 Shrewsbury, Detroit 21
Bruder, Robt. C.........4520 Firestone Ave., Dearborn
Bruer, Edgar S..............12170 Fort St., Wyandotte
Bruer, Edwin L..............12170 Fort St., Wyandotte
Brush, Brock E.......2799 W. Grand Blvd., Detroit 2
Bruton, Martin F.........341 Massachusetts, Detroit 31
Bryan, Donald I................13700 Woodward Ave., Highland Park 3
Buck, Raymond E.........1575 E. Lafayette, Detroit 7
Buell, John H. (R)......188 Provencal Rd., Detroit 36
Buerki, Robin C...........Henry Ford Hosp., Detroit 2
Buller, Harry L. (A)....16120 Greenview Ave., Detroit
Burge, Robert H.............28343 Joy Rd., Dearborn
Burke, Ralph M.....580 University Pl., Grosse Pointe 30
Burnham, Thomas K.....Henry Ford Hospital, Detroit 2
Burns, Robert E.........Henry Ford Hospital, Detroit 2
Burns, Robt. T...........11110 Morang Rd., Detroit 24
Burnside, Howard B...33 Oakland Park, Pleasant Ridge
Burnstine, David........18400 Schaefer, Detroit 48235
Burnstine, Julius Y. (L)......45 Owen Ave., Detroit 2
Burnstine, Perry P.....2329 W. Grand Blvd., Detroit 8
Burr, Geo. C. (L)........1177 Devonshire, Gro. Pointe
Burroughs, Roswell G.........1309 D. Whitney Bldg., Detroit 48226
Burrows, Howard A...10423 W. Warren Ave., Dearborn
Burstein, Harry S.......2950 W. Grand Blvd., Detroit 2
Burstein, I. Marvin......2950 W. Grand Blvd., Detroit 2
Burstein, Morris M.....2950 W. Grand Blvd., Detroit 2
Burton, De Witt T. (L)......54 Arden Park, Detroit 2
Burton, Irving F.....26912 York Rd., Huntington Woods
Burton, John F..............400 E. Lafayette, Detroit
Bush, Glendon J.......18901 W. McNichols, Detroit 19
Butler, James E.........2177 W. Grand Blvd., Detroit 8
Butler, John D.........2173 W. Grand Blvd., Detroit 8
Butler, J. Payne (L)..3403 W. Warren St., Detroit 8
Butler, Lawrence H...14521 East 7 Mile Rd., Detroit 5
Butler, Richard G.............2021 Monroe, Dearborn
Butler, Volney N.......28 W. Adams Ave., Detroit 26
Buttrum, Edward J.......14755 Fenkell St., Detroit 27
Cabral, Hector H...24860 River Heights, Southfield 48075
Cabrera, Enrique......27459 W. Warren, Garden City
Cadger, Ralph E.....719 New Center Bldg., Detroit 2
Cahalan, Jos. L.............15830 Fort St., Southgate
Cain, Waldo L.........8401 Woodward Ave., Detroit 2
Caldwell, Geo. L. (L)..12017 Joseph Campau, Detroit 12
Caldwell, John R.......2799 W. Grand Blvd., Detroit 2
Callaghan, Regis L.........22146 Ford Rd., Dearborn
Calmidis, Yani V...........15453 Mendota, Detroit 38
Cameron, Arthur H. (L)..2853 Biddle Ave., Wyandotte
Cameron, Duncan A...........2021 Monroe, Dearborn
Campbell, Duncan (L)........111 N. Caldonia, Howell
Campbell, Fredk. W., Jr.......648 N. Woodward Ave., Birmingham
Campbell, Harvey E.........3 Robindale Ct., Dearborn
Campbell, Malcolm D. (L)......1520 N. Gulley Rd., Dearborn
Campbell, Mary B. (L)..............10454 Kingston, Huntington Woods
Campbell, Robt. E...8445 E. Jefferson Ave., Detroit 14
Campbell, Ruth B.....1536 David Whitney, Detroit 26
Campbell, Thelma M.....2355 Monroe Blvd., Dearborn
Camps, Enrique (A)....1543 Sherwood Ct., Dearborn
Can, Atila N.........25210 Grand River, Detroit 48240
Cancino-Samson, E............18700 Meyers Rd., Detroit
Candler, Clarence L. (L)......815 Brown St., St. Clair
Cantor, Herbert C................26831 N. Woodward, Huntington Wds.
Cantor, Meyer O...7850 Charing Cross, Bloomfield Hills
Cantow, Lawrence A...19291 Warrington Dr., Detroit 21
Capellari, Elmer E..................Box 3059, Detroit
Caputo, Jos. M...........2021 Monroe Blvd., Dearborn
Caputo, Nancy T.....17712 Mack Ave., Grosse Pte. 30
Capuzzi, Eugene T.......24644 Gleneyrie Dr., Southfield
Caraway, James E. (R)................R.1, Box 503, Franklin, N. Carolina
Carbone, Louis..........14711 Gratiot Ave., Detroit 5
Carbonell, Tomas............353 Devonshire, Dearborn
Carlisle, John C...........15101 Southfield, Allen Park
Carlson, Harold W.....18070 Wildemere Ave., Detroit 21
Carman, Kenneth W.....30928 Ford Rd., Garden City
Carnes, Harry E. (A)......Parke Davis Co., Detroit 32
Carp, Jos..................8717 Van Dyke, Detroit 13
Carpenter, C. J. (L)............P. O. Box 390, Wayne
Carpenter, Glenn B. (L)......2751 W. Seven Mile Rd., Detroit 21
Carpenter, Wm. S...18255 W. McNichols Rd., Detroit 19
Carr, James G. (L)..........14111 Korte, Detroit 15
Carrick, Lee............18050 Mack Ave., Grosse Pte.
Carroll, Elmer H. (L)..9920 Stoepel Ave., Detroit 4
Carroll, Jerome G.........29588 Five Mile Rd., Livonia
Carroll, Lona B. (L)........938 David Whitney Bldg., Detroit 26
Carson, Herman J.......7745 Puritan Ave., Detroit 38
Carstens, Henry R. (L)........6896 N. Clunbury Rd., Birmingham
Carter, John M. (L)..........2860 N. E. 55th Court, Ft. Lauderdale, Fla.
Carter, Leland F.............750 Middlesex, Detroit 30
Case, Hilda B..............261 Mack Blvd., Detroit 1
Cash, Morton B...........St. Marys Hospital, Livonia
Cash, Ralph....15705 W. Ten Mile Rd., Southfield 48046
Cassel, Harry E..............6742 Park Ave., Allen Park
Castle, Maurice E..........18980 Wyoming, Detroit 21
Catalano, Joseph V.........20905 Greenfield, Southfield
Caughey, Andrew F., Jr.......15256 Levan Rd., Livonia
Caughey, Edgar H.......11301 Whittier St., Detroit 24
Caumartin, Fred E.........17184 Wildemere, Detroit 21
Cellar, Frank A., Jr...26789 Woodward Ave., Royal Oak
Ceravolo, Albert J.........468 Cadieux Rd., Detroit 30
Ceresko, Anthony R........9187 Mason Place, Detroit 9
Cetnar, Eugene J..............4322 Bishop, Detroit 24
Chajes, Richard.................15684 Joy Rd., Detroit
Chalat, Ned I...........1553 Woodward Ave., Detroit 26
Chall, Henry G.....2941 W. McNichols Rd., Detroit 21
Chapin, Sidney E............125 N. Military, Dearborn 7
Chapman, Aaron L. (L).............406 W. Frisco Rd., Pensacola, Florida
Chapman, Paul T............1151 Taylor Ave., Detroit 2
Chapman, Roland H..............3790 Woodward Ave., Detroit 48201
Chapnick, Henry A.............19335 Prarie, Detroit 21
Chapper, Barbara M..............861 Monroe, Dearborn
Charnas, Sidney....1129 Dav. Whitney Bldg., Detroit 26
Charnley, Arnold D.........1678 Merriman Rd., Wayne
Chase, Clyde H. (R).............2922 Dawes St. S.E., Grand Rapids 8
Chason, Jacob L...........1401 Rivard St., Detroit 7
Chavis, William M.......15866 12th Street, Detroit 21
Check, Frank E.........76 W. Adams Ave., Detroit 26
Chen, Allen S. Y.........Wayne Co. Gen. Hosp., Eloise
Chen, Calvin H................State Hosp., Northville
Chen, Shek C..............1326 St. Antoine, Detroit 26
Chen, Vincent V...........1800 Tuxedo, Detroit 48206
Cherenzia, B. J...7437 Wellbourne Ct., Birmingham 48010
Chesky, Robert H.........Herman Kiefer Hosp., Detroit
Chesluk, Herman M...17191 J. Couzens Hwy., Detroit 35
Chester, Alice........25085 Coolidge Hwy., Oak Park
Chester, Wm. P.........28 W. Adams Ave., Detroit 26
Childs, Geo. M.........2970 W. Grand Blvd., Detroit 2
Chipman, Willard A.........14300 W. McNichols Rd., Detroit 35
Chipoco, Adolfo M.......25210 Grand River, Detroit 40
Chodorkoff, Bernard......19435 Shrewsbury, Detroit 21

Chown, Marion C...............2025 Ford, Wyandotte
Christensen, R. C.....20861 Mack Ave., Gros. Pte. Woods
Christopher, James G.....20295 Douglas Ct., Birmingham
Chrouch, Laurence A. (L)........Pleasant Hill, Tenn.
Church, Aloysius S.......19570 Bretton Dr., Detroit 23
Churchill, John A...........Lafayette Clinic, Detroit 7
Cioffari, Mario S...15924 W. Seven Mile Rd., Detroit 35
Ciprian, Jos. E. (L)....1775 E. Grand Blvd., Detroit 11
Glapper, Muir..............1401 Rivard St., Detroit 7
Clark, Arthur M..............401 River Lane, Dearborn
Clark, Clarence M. (L)..2605 Holbrook Ave., Detroit 12
Clark, Harold E. (L)..................Cherry Lodge, Pt. Franks, Ont., Canada
Clark, Max D...........Henry Ford Hospital, Detroit 2
Clark, Wm. P................1808 Baldwin, Ann Arbor
Clarke, Chas. N..............21950 Greenfield, Detroit
Clarke, Norman E. (L)......21950 Greenfield, Detroit
Clarke, Norman E., Jr..........21950 Greenfield, Detroit
Clarke, Robt. B.........76 W. Adams Ave., Detroit 26
Glemens, Raymond R.............23843 Joy, Dearborn
Clermont, Volna..............5050 Joy Rd., Detroit 4
Clifford, John E...................18348 Mack, Detroit
Clifford, Thos. P. (L)......1750 Dav. Whitney Bldg., Detroit 26
Climie, Andrew R. W.......Harper Hospital, Detroit 1
Cline, Richard S.......15101 Plymouth Rd., Detroit 27
Clune, John P.........226 Professional Bldg., Detroit 36
Coates, E. Osborne, Jr...Henry Ford Hospital, Detroit 2
Gobane, John H. (L)......10 Peterboro Ave., Detroit 1
Cochrane, Edgar G.....503 Med. Arts Bldg., Detroit 3
Goeorelis, S. G. (A)
Gohen, Herbert H.....12700 W. 7 Mile Rd., Detroit 35
Cohen, Melvin F...........20905 Greenfield, Southfield
Cohn, Danl. E...............409 Fox Bldg., Detroit 1
Cohn, S. Leonard......18055 Greenfield, Detroit 48235
Gohoe, Don A. (L)..18916 Woodward Ave., Detroit 3
Cole, James E. (L).........344 Glendale Ave., Detroit 3
Cole, Wyman G.C. (L)......900 Whitmore Rd., Detroit
Cole, Wyman G. C., Jr...3011 W. Grand Blvd., Detroit 2
Goleman, Margarete W. (L).........1209 S. Woodward, Royal Oak
Coleman, Peter F.............31410 Joy Rd., Livonia
Coleman, Wm. G...20526 Grand River Ave., Detroit 19
Coles, Thomas B., Jr.........Grace Hospital, Detroit 1
Collier, Beverly A.........Henry Ford Hosp., Detroit 2
Collier, Richard L.........Henry Ford Hospital, Detroit
Collings, M. Raymond (A)......9201 W. Outer Drive, Detroit 19
Collins, James E.....13103 W. Chicago Blvd., Detroit 28
Collins, James W.....15870 12th Street, Detroit 48238
Colvin, Leslie T.......3011 W. Grand Blvd., Detroit 2
Colyer, Raymond G. (R)......284 Pilgrim, Birmingham
Combs, Julius V...............2424 Puritan, Detroit 38
Comly, Hunter H.............5475 Woodward, Detroit 2
Compton, Wm. A., Jr...........36825 Bibbins, Romulus
Comstock, Lawrence A..........3700 West Rd., Trenton
Conklin, Emma J.........Wayne Co. Gen. Hosp., Eloise
Conley, Lowry C. M. (L)....99 Tuxedo Ave., Detroit 3
Connelly, Richard C...1360 Three Mile Dr., Grosse Pte.
Connolly, Paul J...16778 Westmoreland Rd., Detroit 19
Connors, John J.......25657 Southfield Rd., Southfield
Considine, Basil, Jr...........Grace Hospital, Detroit 1
Cook, Carla A. (A)......1300 Lafayette East, Detroit 7
Cook, James A...........2246 20th Street, Wyandotte
Cook, James C..............3825 Brush St., Detroit 1
Gookinham, Frank............999 S. Highland, Dearborn
Cooksey, Warren B. (L)....801 Adams Rd., Birmingham
Cooper, James B.....18150 Mack Ave., Grosse Pointe 30
Cooper, Ralph R.....1515 Dav. Whitney Bldg., Detroit
Cooper, Richard F.....18100 Shadbrook Dr., Northville
Corbeille, Gatherine (L)........3011 W. Grand Blvd., Detroit 2
Corbett, David P.............Harper Hospital, Detroit 1
Cortez, Joseph A.......19350 W. McNichols, Detroit 15
Costello, Russell T.......3001 W. Grand Blvd., Detroit 2
Costello, Stephen D.........9435 Island Dr., Grosse Ile
Cotant, John F.........14044 W. McNichols, Detroit 35
Cotton, Schuyler O. (R)..7904 Vernor Hwy., Detroit 9
Courville, Chas. J...703 Northland Med. Bld., Southfield
Cowan, Wilfrid (L)..14239 Chandler Pk. Dr., Detroit 13
Cowen, Leon B. (L)......1001 Kales Bldg., Detroit 26
Gowen, Robt. L. (L)..........91 E. Kirby, Detroit 2

Cox, Frank, Jr.........Henry Ford Hospital, Detroit 2
Coyle, James E.............573 Fisher Bldg., Detroit 2
Craig, Roy D.......3790 Woodward Ave., Detroit 48201
Craig, Roy E.......74 Fontana Lane, Grosse Pt. Shores
Crawford, Robert I. (A)........................Lyons
Crawley, Eugene H.....885 Bloomcrest, Bloomfield Hills
Crews, Thos. H. (L)..3011 W. Grand Blvd., Detroit 2
Crockett, E. E. J...........7341 W. Warren, Detroit 10
Croll, Leo J.........12703 W. 7 Mile Rd., Detroit 35
Croll, Maurice....12703 W. Seven Mile Rd., Detroit 35
Crook, Chas. L.......60 Colorado St., Highland Park 3
Cross, Harold E.....68 N. Deepland Rd., Grosse Pointe
Crossen, Robert J.........933 David Wh. Bldg., Detroit
Groushore, James E...............1185 Westwood Dr., Birmingham 48009
Cserhalmi, Maria V.......1302 Beaconsfield, Detroit 36
Cubberley, Robt. B.........1800 Tuxedo St., Detroit 6
Cueto, Jose M...............23200 Woodward, Ferndale
Cullis, Frank......................261 Brady, Detroit 1
Curhan, Jos. H...........18709 Meyers Rd., Detroit 35
Curtis, Frank E. (L)......273 Kenwood Ct., Detroit 36
Curtiss, Wm. P.......22631 Mack Ave., St. Clair Shores
Cusick, Paul L...........1108 Stroh Bldg., Detroit 26
Diagnault, F. M...........20905 Greenfield, Southfield
Daitch, Harold J...22341 W. Eight Mile Rd., Detroit 19
Daitch, Martin H...13011 W. McNichols Rd., Detroit 35
Dale, Esther H.............1401 Rivard St., Detroit 7
Dale, Mark............3702 E. 8 Mile Rd., Detroit 34
Dal Santo, G...............1401 Rivard St., Detroit 7
Daly, Eugene T..............24781 Fenkell, Detroit 29
Danforth, James C., Jr..............20175 Mack Ave., Grosse Pte. Wds.
Danforth, Robt. D...20175 Mack Ave., Grosse Pte. Wds.
Danielski, John J.....37264 Fountain, Garden City 48135
Danto, Bruce L.................18516 Hartwell, Detroit
Danz, George W...............1539 Ford, Wyandotte
Daoust, Patrick H...........15520 Garfield, Allen Park
Darling, Chas. E.............673 Fisher Bldg., Detroit 2
Dashiell, Grayson F...........1800 Tuxedo, Detroit 6
Davidson, Harold H...........19310 Wyoming, Detroit
Davidson, Harry O.....2799 W. Grand Blvd., Detroit 2
Davies, Thos. S. (L)..............15115 E. Jefferson, Grosse Pointe 30
Davies, Windsor S.........28 W. Adams Ave., Detroit 26
Davis, Herbert A...........9901 Melbourne, Allen Park
Davis, Jerome D. (M)....19075 Middlebelt Rd., Livonia
Dawson, W. A. (R)........188 Lake Silver Dr. N.W., Winter Haven, Fla.
Day, A. Jackson..........245 Cloverly Rd., Detroit 36
Day, Francis T...............18540 Mack, Detroit 36
Day, Jay G.......1016 Professional Plaza, Detroit 48201
Deaenlle, Eliodoro................2239 Nancy, Warren
Dean, Carleton R. (M)........Off. of Vocnl. Rehab., 42 Broadway, Room 1200, New York City 4, N.Y.
Dean, George A...........19309 Greenfield, Detroit 35
De Busk, Roger W.........4160 John R St., Detroit 1
Deering, Robt. J.........1359 Champaign, Lincoln Park
De Giustino, Caesar....1175 E. Grand Blvd., Detroit 11
De Groat, Albert F.........1151 Taylor Ave., Detroit 2
Dietch, Daniel................Grace Hospital, Detroit
De Jongh, Edwin........Gen. Motors Building, Detroit
Delaini, Stella M.......3011 W. Grand Blvd., Detroit 2
De Lawrence, Betty J...21576 Michigan Ave., Dearborn
De Lawrence, Thomas..21576 Michigan Ave., Dearborn
Del Giorno, Thos. E. (R)..809 Shoreham Dr., Detroit 36
Delgiudice, P.A...............Grace Hospital, Detroit 1
Del Valle, Mario............19936 Parkard, Detroit 34
Dennis, Melvin S. (A)......22146 Ford Rd., Dearborn
Denson, Andrew L. (A)..2224 Hazelwood, Detroit 48206
Deresz, Alphonse R.....4204 E. Outer Dr., Detroit 34
Derleth, Paul E.....563 W. Oakridge Ave., Ferndale 20
Derr, John W.....1145 Dav. Whitney Bldg., Detroit 26
Derrick, C. F...........3677 Fort Street, Lincoln Park
De Ryke, Gilbert R...............13535 Salem, Detroit
De Smyter, Geo. C.........15527 E. Warren, Detroit 24
De Spelder, Ray E.....2970 W. Grand Blvd., Detroit 2
Deuby, Owen J.......15121 W. Seven Mile Rd., Detroit
Devine, Herbert W.......22101 Moross Rd., Detroit 36
Diakow, Lilian M.........1539 N. Line Rd., Wyandotte
Dibble, Harry F. (L)..1553 Woodward Ave., Detroit 26
Dickson, Basil R.........337 W. Grand Blvd., Detroit 16
Dickson, Elias L., Jr.....7716 Oakland Ave., Detroit 11

Dickson, Laurie C., Jr..................400 Lincoln Rd., Grosse Pointe 30
Dickson, Leon A...........5535 W. Chicago, Detroit 4
Dickson, Mary D.....18424 Mack Ave., Grosse Pointe 36
Diebel, Nelson W.........660 Cadieux Rd., Detroit 30
Diekman, Fred C.....31815 Southfield Rd., Birmingham
Dietze, Margaret R..............861 Monroe, Dearborn
Dietzel, Hugo O. (R)..............844 Hemlock Dr., San Carlos, Calif.
Di Lella, Leonard L.......Henry Ford Hosp., Detroit 2
Dill, Hugh L.........16114 E. Warren Ave., Detroit 24
Dill, J. Lewis..............18615 Birchcrest, Detroit 21
Di Loreto, Panfilo C.....285 Vincennes Pl., Detroit 36
Di Maso, Gennaro J...........21501 Kelly, East Detroit
Dimond, Geo. E...........18401 Bretton Dr., Detroit 23
Dionne, Paul E.........12500 E. 12 Mile Rd., Warren
Dipiero, Raniero.................1800 Tuxedo, Detroit 6
Dittmer, Edwin F.......18342 Mack Avenue, Detroit 36
Ditzler, John W...........581 Rivard Blvd., Detroit 30
Dixon, Fredk. W..............245 S. Martha, Dearborn
Dixon, Ray S. (L)..........5001 Van Dyke, Detroit 13
Dodds, John C. (L)..........16106 Twelve Mile Rd., Southfield 48076
Dodenhoff, Chas. F.........18031 Kelly Rd., Detroit 24
Dodrill, Forest D.......Woodberry Dr., Bloomfield Hills
Doering, Wendell R.....17555 James Couzens, Detroit 35
Doig, Victor F.................19676 Dale, Detroit 19
Dolan, Edward A.....1960 Hammond Lake Dr., Pontiac
Dolega, Stanley F.....15640 E. Warren Ave., Detroit 24
Dolgoff, Sidney........15600 Michigan Ave., Dearborn
Dolin, Simon..............2900 S. Fort St., Detroit 17
Domzalski, Henry M.....15252 Gratiot Ave., Detroit 5
Donath, Rolf W.........719 New Center Bldg, Detroit 2
Donovan, Eugene T.....13349 Michigan Ave., Dearborn
Donovan, Richard S.....17555 James Couzens, Detroit 35
Doran, John H.........15101 Plymouth Rd., Detroit 27
Dorman, Jack...................18331 Fairfield, Detroit
Dorostkar, M. G...................24752 Currier Ave., Dearborn Hgts. 48204
Dorsey, Edward C.......8344 E. Jefferson, Detroit 14
Dorsey, John M.....65 Moss Avenue, Highland Park 3
Doty, Chester A. (L)..........135 E. Maryland Ave., Phoenix, Az. 85012
Doub, Howard P. (L)..2799 W. Grand Blvd., Detroit 2
Dougherty, Edw. A., Jr.......18241 W. McNichols Rd., Detroit 19
Douglas, Clair L. (L)............1201 Richmond St., London, Ontario, Canada
Douglass, Robt. C...23023 Orchard Lake Rd., Farmington
Dovitz, Benj. W.......16820 Greenfield Ave., Detroit 35
Downer, Ira G. (L)..8445 E. Jefferson Ave., Detroit 14
Downes, Geo. O.............15062 Houston, Detroit 5
Drake, Ellet H.........Henry Ford Hospital, Detroit 2
Drake, James J. (R)....2820 Woodslee Dr., Royal Oak
Drapiza, Ruth L.......22231 W. Outer Dr., Dearborn
Draves, Edward F...........19647 Joy Rd., Detroit 28
Drazek, Jos. A...............14001 Greenfield, Detroit
Drozdowska, Z. J. F...1413 Lafayette Twrs. W., Detroit
Drumm, John K.......1420 St. Antoine St., Detroit 26
Dorothy, D'Sena............33000 Palmer Road, Wayne
Dubin, Jos. J.......10401 W. Chicago Blvd., Detroit 4
Dubpernell, Martin S. (L)..4019 Gilbert St., Detroit 10
Dubpernell, Robt. O.....18595 Grand River, Detroit 23
Dudek, John J...........19244 Grand River, Detroit 23
Dumke, Paul R.........2799 W. Grand Blvd., Detroit 2
Duncan, James R...............5050 Joy Rd., Detroit
Dundas, Edward M., Jr.......4520 Firestone, Dearborn
Dunlap, Henry A.....7815 Jefferson Ave. E., Detroit 14
Dunn, Cornelius E. (L)......17230 Mack Ave., Detroit
Dupler, Gerald E.......24234 Michigan Ave., Dearborn
Durham, Everett W...23100 Cherry Hill Rd., Dearborn 7
Durham, Robt............Henry Ford Hosp., Detroit 2
Dutcher, Dwight J...........711 S. Oxford, Detroit 36
Duwe, Frank A.........25321 Five Mile Rd., Detroit 39
Dwaihy, Paul J. (A)......14530 E. Warren, Detroit 15
Dwyer, Francis W.....14440 W. McNichols, Detroit 35
Dyer, H. Lorne......35559 Oakdale Dr., Livonia 48154
Dykema, Rosemary M.......18424 Mack Ave., Detroit 36
Dziuba, John F.......18901 W. Warren Ave., Detroit 28
Dzul, Paul........17800 E. 8 Mile Rd., Detroit 48236
Eades, Chas. C..........19635 Mack Ave., Detroit 36
Easterly, Robt. L.........1404 Ford Avenue, Wyandotte
Eaton, Crosby D. (L)..3011 W. Grand Blvd., Detroit 2
Echt, Raymond J...............V.A. Hospital, Dearborn
Eckhous, Arthur W.......1015 Kales Bldg., Detroit 26
Economy, Donald E.........18 W. Lane Ct., Dearborn
Eder, Saml. J. (L)...........19541 Cranbrook, Detroit
Edgar, Irving I.....1036 Dav. Whitney Bldg., Detroit 26
Edmonds, Gerald W.....19795 St. Marys Ave., Detroit 35
Edmonds, Wm. N. (L)....18525 Merriman Rd., Livonia
Edmondson, Robt. B......18501 Mack Ave., Detroit 36
Edwards, C. Rupert (L) Detroit Receiving Hosp., Detroit
Edwards, James G.....17751 E. Warren Ave., Detroit 24
Egan, Charles F.....Wyandotte Gen. Hosp., Wyandotte
Eisenbrey, A. B.......1026 Fisher Bldg., Detroit 48202
Eisenstein, B..................459 Fisher Bldg., Detroit
Eisman, Clarence H. (L)..........1121 Whittier Rd., Grosse Pointe 30
Eldredge, Edward F...18540 Mack Ave., Grosse Pointe 36
Elie, Jean C.......938 Dav. Whitney Bldg., Detroit 26
Elliott, Jos. P., Jr.......Henry Ford Hospital, Detroit 2
Elliott, Robt. N...........760 Fisher Bldg., Detroit 2
Ellis, Frank R.............800 S. Lafayette, Dearborn 7
Elman, Meyer J...............108 W. Hancock, Detroit
Elson, Abraham L...........Lafayette Clinic, Detroit 7
Elton, Richard F. (A)..Detroit Gen. Hosp., Detroit 48226
Elvidge, Robt. J.......2900 W. Grand Blvd., Detroit 2
Emmert, Herman C. (L)..4927 N. 34th, Arlington 7, Va.
Endler, Gerhard C...1394 Roslyn Rd., Grosse Pte. Wds.
Enfroy, Henri L.........19980 Shrewsburg, Detroit 21
Engel, Earl H.......2336 Van Alstyne Blvd., Wyandotte
Engstrom, Fredk. W...........2021 Monroe, Dearborn
Engstrom, Ruby M.........1777 Culver Ave., Dearborn
Eno, Laurel S.......212 Eastland Pr. Bldg., Detroit 36
Ensign, Dwight C.........Henry Ford Hospital, Detroit
Eppler, William R. (A)..........43 Harris Dr. East, Ft. Rucker, Ala. 36360
Epstein, Burton S.........18215 Greenfield, Detroit 35
Erickson, Eldon W...25750 W. Outer Dr., Lincoln Park
Erickson, Miles A.........1932 Ford Ave., Wyandotte
Ericsson, Arthur D.............Harper Hospital, Detroit
Ericsson, Judith A.........719 New Center Bldg., Detroit
Erman, Jos. M.........19530 Stratford Rd., Detroit 21
Ermete, Sait D.........32633 Cherry Hill, Garden City
Ernest, Reginald H...........5050 Joy Rd., Detroit 4
Eschbach, Jos. W.........935 S. Military St., Dearborn
Eurs, Frank J.........1340 Maccabees Bldg., Detroit 2
Evans, Gomer P., Jr...1553 Woodward Ave., Detroit 26
Evans, Jos. M...............16431 Harper, Detroit 24
Evans, Tommy N...........18630 Fairway Dr., Detroit
Ewing, Chas. H...........17120 E. Warren, Detroit 24
Eyler, Wm. R...........2799 W. Grand Blvd., Detroit 2
Eyres, Alfred E...........17800 E. 8 Mile, Detroit 36
Fabok, Ferenc...........Northville St. Hosp., Northville
Fachnie, Harold L.....15800 W. McNichols Rd., Detroit
Faello, Sebastian J.....16840 E. Warren Ave., Detroit 24
Fagan, James P...........987 E. Jefferson, Detroit 7
Fagin, Irving D.......18254 Livernois Ave., Detroit 21
Fahim, Ramfis B...14634 E. 7 Mile Rd., Detroit 48205
Falick, Mordecai L..............18652 Birchrest, Detroit
Falk, Ira E..................17411 Cherrylawn, Detroit 21
Fallis, Lawrence S. (L)......2799 W. Grand, Detroit 2
Fandrich, Theodore S. (R)..........200 Miramar Ave., Montecito, Calif.
Farbman, Aaron A.........14515 Kercheval, Detroit 15
Fargotstein, Ralph........St. Johns Hospital, Detroit 36
Farina, Angel M.............23550 Joy Rd., Detroit 39
Farmer, Wm. L., Jr.........3335 W. Davison, Detroit 38
Farnam, Larry M., Jr.......6200 Cadieux, Detroit 48224
Faunce, Sherman P.........1824 Seminole St., Detroit 14
Fea, John F.........Mt. Carmel Mercy Hosp., Detroit 35
Feigelson, Howard H.........Sinai Hospital, Detroit 35
Feld, David......15101 W. McNichols Rd., Detroit 35
Feldkamp, Lee E...............360 N. Main, Plymouth
Feldman, Irwin .... 37380 Glenwood, Wayne
Feldman, Nathanial L...........24370 Tamarack Circle, Southfield
Feldman, Paul H.........16800 Greenfield, Detroit 35
Feldstein, Martin Z...........13345 W. McNichols Rd., Detroit 35
Fellner, Wm. A.....3 202 Gen. Motors Bldg., Detroit 2
Fellows, William R.............3815 Pelham, Dearborn

Fenech, Harold B..............3790 Woodward, Detroit
Fenner, Wm. G..........12454 E. Outer Dr., Detroit 24
Fennessey, John F..........512 Rivard, Grosse Pte. 30
Fenton, James L.....1615 Birmingham Blvd., Birmingham
Fenton, Meryl M...8600 W. McNichols Rd., Detroit 21
Fenton, Russell F.....15125 Grand River Ave., Detroit 27
Fenton, Stanley C. (L)..15618 E. Warren, Detroit 48224
Fentress, Vance....1501 Dav. Whitney Bldg., Detroit 26
Feringa, Philip J..........20901 Moross Rd., Detroit 36
Ferrara, Richard J...20045 Mack Ave., Grosse Pte. Woods
Ferrara, Virginia M..........18422 Woodward, Detroit 3
Ferris, George N............20001 Greenfield, Detroit 35
Ferszt, Marion S..............15369 Grandville, Detroit
Figiel, Leo S................1500 Balmoral, Grosse Pte.
Figiel, Steven J..............4160 John R St., Detroit 1
Filkin, Lawrence E............621 Fairbrook, Northville
Fill, Leon...............2310 Cass, Exec. Suite, Detroit
Finch, Alvis D.....18000 Jas. Couzens Hwy., Detroit 35
Finch, F. Sinclair...........984 N. Renaud, Detroit 36
Finck, Jerome H............25841 Plymouth, Detroit 39
Fine, Edward............1112 Kales Bldg., Detroit 26
Fine, Gerald............Henry Ford Hosp., Detroit 2
Fink, Saml...................10161 Burton, Oak Park
Finkelstein, I. S...............17508 Dorset, Southfield
Finkelstein, M. B..............18254 Livernois, Detroit 21
Firestone, N. S. (M)..24671 Martha Wash., Southfield
Firnschild, Paul G............10538 Andrews, Allen Park
Fischer, Arthur J..........36016 Five Mile Rd., Livonia
Fischer, Fredk. J................654 Fisher Bldg., Detroit
Fischhoff, Jos................18674 Fairfield, Detroit 21
Fishbein, Herbert L.....987 E. Jefferson Ave., Detroit 7
Fisher, Geo. S.....1709 Dav. Whitney Bldg., Detroit 26
Fisher, James M.......176 Merriweather, Grosse Pte. 36
Fitzgerald, C. H.......Wayne Co. Gen. Hospital, Eloise
Fitzgerald, James M...15801 W. McNichols, Detroit 35
Fitzpatrick, F. W............17187 Schaefer, Detroit 35
Flaherty, Henry J...19600 W. McNichols Rd., Detroit 19
Flaherty, Norman W.....24315 Fairmont Dr., Dearborn
Flake, Thomas M................5050 Joy Rd., Detroit 4
Flora, Wm. R...17800 E. Eight Mile Rd., Detroit 48236
Flower, James A., (R)..3230 Sunset Dr., Fallbrook, Calif.
Floyd, William S........18055 Greenfield, Detroit 48235
Fogt, Herbert E. (L)..16829 Harper Ave., Detroit 24
Fogt, Robt. G.............16829 Harper Ave., Detroit
Foley, Hugh S. (L)..........23100 Cherryhill, Dearborn
Foote, John A.......1336 Southfield Rd., Lincoln Park
Ford, Geo. A. (L).......28 W. Adams Ave., Detroit 26
Fordell, Frank S..........22159 W. Outer Dr., Dearborn
Forgrave, Edward G.....18520 Grand River, Detroit 23
Forrer, Gordon R.....20141 James Couzens, Detroit 35
Fosnaugh, Robert P.......23185 Timberline, Southfield
Foster, E. Bruce......20905 Greenfield Rd., Southfield
Foster, Owen C. (L)..1553 Woodward Ave., Detroit 26
Foster, Wallace M..............13700 Woodward Ave., Highland Park 3
Fountain, Charles W..........23851 Ford Rd., Dearborn
Fowler, Melvin E..........247 E. Warren St., Detroit 1
Fraiberg, Paul L. (R).........12950 W. Chicago Blvd., Detroit 28
Frame, Boy........18694 Warrington Dr., Detroit 21
France, Chas. J.......17800 E. Eight Mile Rd., Detroit
Franjac, Marion J........25447 Plymouth Rd., Detroit 39
Frankel, Maurice A...14219 W. McNichols Rd., Detroit 35
Franklin, John E..................4075 Ink. Rd., Inkster
Franzen, Nils A...........15360 Oakfield Ave., Detroit
Frazer, Mary M. (L)........748 Seminole, Detroit 14
Frederickson, Geo. C............7430 Second, Detroit 2
Free, Harry W.........14300 W. McNichols, Detroit 35
Freedman, Arthur M.........7701 Wyoming, Dearborn
Freedman, John (R)......4853 Second Blvd., Detroit 1
Freeman, Donald K.......881 Chalmers St., Detroit 15
Freeman, Mable..1316 Dav. Broderick Twr., Detroit 26
Freeman, Michael W.......1810 Wellesley Dr., Detroit 3
Freeman, Wilmer........940 East 7 Mile Rd., Detroit 3
Freid, Samuel..............17537 Parkside, Detroit 21
Freier, Andrew A.........19321 Greenfield, Detroit 35
Freier, Morton L.........13051 Puritan Ave., Detroit 27
Freilich, Olga........Crittenton Gen. Hosp., Detroit 6
Freitas, Eugene L..........St. Johns Hospital, Detroit 36
Fremont, J. Courtney (A)..............55 Hall Place, Grosse Pte. Frms.
Frey, James L.........1553 Woodward Ave., Detroit 26
Friedlaender, Alex S..........10300 W. Seven Mile Rd., Detroit 21
Friedlaender, Sidney........10300 W. Seven Mile Rd., Detroit 21
Friedlander, Joseph (A)........3776 Leslie, Detroit 38
Friedman, David....2429 E. Milwaukee Ave., Detroit 11
Friedman, Isidor H.............3773 2d Ave., Detroit 1
Friedman, Seymour........5132 Allen Rd., Allen Park
Frost, Harold M.........Henry Ford Hosp., Detroit 2
Frost, Richard G...............1800 Tuxedo, Detroit 6
Fryfogle, James D...........C.D. 8, Med. Concourse, Northland Center, Southfield
Fulgenzi, William R.....1305 Kales Building, Detroit 26
Fuller, Hugh M.........404 Dav. Wht. Bldg., Detroit 26
Fulton, Wm. J. (R)......Wye Ferry, Queenstown, Md.
Gaffney, J. Mitchell............13600 Ohio, Detroit 21
Gagliardi, Carl A...........3516 Fort St., Lincoln Park
Gahagan, Thomas........Henry Ford Hosp., Detroit 2
Gajewski, John E.......Park Davis and Co., Detroit 32
Galacz, Robert J............10703 Santa Maria, Detroit
Galantowicz, H. C.........7433 Mich. Ave., Detroit 10
Galantowicz, Thos. H.........23601 Ford Rd., Dearborn
Galdonyi, Laslo (L)........2311 Dav. Broderick Twr., Detroit 26
Galerneau, Darrel B. (L)....7394 Engelman, Centerline
Gall, Henry............18335 Hartwell, Detroit 48235
Gallagher, James P.........828 Fisher Bldg., Detroit 2
Gallant, Vincent J.............16766 Ashton, Detroit 19
Galvin, Paul P.........14440 W. McNichols Rd., Detroit
Ganos, Thos...............6742 Park Ave., Allen Park
Gans, Robert I.....7310 W. Seven Mile Rd., Detroit 21
Ganschow, John H.......1840 Holbrook Ave., Detroit 12
Gardner, Lawrence W...6071 W. Outer Dr., Detroit 35
Gardner, Max L.......19557 Mack Ave., Grosse Pointe
Gariepy, Louis B.......16401 Grand River St., Detroit 27
Gariepy, Louis J. (L)....16401 Grand River, Detroit 27
Garrett, Neil (M)..17000 W. Eight Mile Rd., Southfield
Garwacki, Dennis J. (A)....21123 Vernier, Detroit 36
Gass, H. Harvey............529 Fisher Bldg., Detroit 2
Gaston, Herbert B.....7501 W. Morrow Circle, Dearborn
Gates, Nathaniel (L)....2240 W. Grand Blvd., Detroit
Gaynor, Alex............1755 E. 7 Mile Rd., Detroit 3
Gehring, Harold W.........20211 Greenfield, Detroit 35
Gehrke, August E. (R)....24741 Tudor Lane, Franklin
Geib, Ledru O. (L)....3528 Van Dyke Ave., Detroit 14
Geitz, Wm. A. (R)........Box 1133, Boca Raton, Fla.
Gelbach, Philip D.........2900 S. Fort St., Detroit 17
Gerisch, Robt. A...1217 Dav. Whitney Bldg., Detroit 26
Gerondale, Elmond J. (L)......3001 W. Grand Blvd., Detroit 2
Gibson, Dunbar P.................Box 1256, Detroit 31
Gibson, Wm.......3790 Woodward Ave., Detroit 48202
Giese, Fred W...........18526 Schoolcraft, Detroit 23
Gigante, Nicola (L)............10 Peterboro, Detroit 1
Gigliotti, David..........16001 9 Mile Rd., Southfield
Gilbert, Harold R...........13146 Phelps, Wyandotte
Giles, Conrad L...407 Northland Med. Bldg., Southfield
Gillespie, Stephen M.......23100 Cherry Hill, Dearborn
Gilpin, Watson A.....1539 Lockridge, Bloomfield Hills
Gilreath, James L.............1800 Tuxedo, Detroit 6
Gilroy, John...................Harper Hospital, Detroit
Gimbel, Nicholas S.............1800 Tuxedo, Detroit 6
Ginsberg, Harold I.....15344 McNichols Rd., Detroit 35
Girnius, Birute................15439 Harper, Detroit 24
Gitlin, Chas...........2424 Oakman Blvd., Detroit 35
Gittins, Perry C.........20905 Greenfield Rd., Southfield
Givens, Donovan H., Jr.
Gizynski, Waldemar E.....15400 Edington Rd., Livonia
Glasgow, Gordon K. (R)..........339 Chalfonte Ave., Grosse Pte. Farms
Glazer, Walter S.....1490 Charrington Rd., Birmingham
Glees, John L. (A)..317 Moran Rd., Gro. Pte. Frms. 36
Glement, Raymond D. (L)..16126 Woodring Ct., Livonia
Clikman, Victor......20131 James Couzens, Detroit 35
Glowacki, Ben F.........8 Mile & Greenfield, Southfield
Glowacki, Edward T...........P.O. Box 5195, Detroit
Glowacki, Raymond M............961 Monroe, Dearborn
Godley, Alegro J.......3790 Woodward, Detroit 48201
Goerke, Elmer A.........36663 Goddard Rd., Romulus
Goetz, Angus G.......1553 Woodward Ave., Detroit 26

Goins, Wm. F.................6675 Tireman, Detroit 4
Goldberg, Arthur......340 E. Eight Mile Rd., Detroit 3
Goldberg, Harry H. (L)..2211 Woodward Ave., Detroit 1
Goldberg, Nathan H. (L)........2211 Woodward Ave., Detroit 1
Golden, Alfred......26764 York Rd., Huntington Woods
Goldfaden, Alfred..........9122 W. Fort St., Detroit 9
Goldman, Aubrey....17191 James Couzens, Detroit 35
Goldman, Perry..........18050 Fairway Dr., Detroit 21
Goldman, Robert T.....Wayne County Hospital, Eloise
Goldrath, Milton H...17000 W. 8 Mile Rd., Southfield
Goldstein, Abe S.......18450 North Lawn, Detroit 21
Gollman, Maurice D.........17000 W. Eight Mile Rd., Southfield
Gomley, Romuald H.....7220 Gratiot Ave., Detroit 13
Goodman, Maxwell M.....22265 Garrison, West Dearborn
Goodman, Virgil P.....762 Bedford Rd., Grosse Pte. Pk.
Goodwin, Warren W...20101 James Couzens, Detroit 35
Goodwin, William P.........1616 Boston W., Detroit 6
Gordon, Marvin.........1420 St. Antoine, Detroit 48226
Gordon, Wm. E...........18058 Greenfield, Detroit 35
Gorelick, Martin J.....23901 Michigan Ave., Dearborn
Goryl, Stephen V.............21501 Kelly, East Detroit
Goss, Saml. B.................10 Peterboro, Detroit 1
Gostine, Edmond J.........9750 Chalmers, Detroit 13
Gotham, James E.............3825 Brush St., Detroit 1
Gotman, Abraham G.....987 E. Jefferson Ave., Detroit 7
Gottlieb, Jacques S.........951 E. Lafayette, Detroit 7
Gouda, Salah E. A...........Annapolis Hospital, Wayne
Goux, Raymond S. (L)..........17566 Muirland Ave., Detroit 48221
Grabiel, Amado....................20145 Wedgewood, Gro. Pte. Wds. 48236
Grace, Jos. M.......31140 Huntley Square, Birmingham
Grady, Jos. A...........946 Three Mile Dr., Detroit 30
Graham, John G., Jr....................491 Lincoln Rd., Grosse Pointe 30
Graham, Theodore N...........2424 Puritan, Detroit 38
Granger, Francis L.......14160 Gratiot Ave., Detroit 5
Granger, George R...........705 David Whitney Bldg., Detroit 26
Grant, Abraham H.......22454 Chatsford Cir., Southfield
Grant, Heman E. (L)....Box 224, Babson Park, Florida
Gratton, Henri L. (L)....76 W. Adams Ave., Detroit 26
Graves, James H.........392 City County Bldg., Detroit
Gray, Howard O.................5050 Joy Rd., Detroit
Greek, Louis M.........12901 E. McNichols, Detroit 5
Green, Edward W.......2799 W. Grand Blvd., Detroit 2
Green, Ellis R. (L)......5172 Scotten Ave., Detroit 10
Green, Henry L...............24260 Dante, Oak Park
Green, Lewis............13000 Grand River, Detroit 27
Green, Milton M.....17000 W. 8 Mile Rd., Southfield
Green, Nelson W.....31815 Southfield Rd., Birmingham
Green, Thomas, Jr. (A)........5050 Joy Rd., Detroit 4
Greenberg, Jack R.....15743 W. 7 Mile Rd., Detroit 35
Greenberg, Julius J.....5328 W. Outer Dr., Detroit 35
Greenberg, Morris Z.........9105 Van Dyke, Detroit 13
Greenberg, Stanley..........20905 Greenfield, Southfield
Greene, John B.......2179 W. Grand Blvd., Detroit 8
Greene, Thomas J. (A)......2425 W. Boston, Detroit 6
Greenlee, Wm. T. (L)....15053 Maddelein, Detroit 5
Greenslit, Frank S...U. S. Vets. Admin. Hosp., Dearborn
Gregory, Louis J.........47 Webber Place, Detroit 36
Greiner, Bert A.....14607 E. Seven Mile Rd., Detroit 5
Grekin, John N...7421 W. Seven Mile Rd., Detroit 21
Grier, William H.........1575 E. Lafayette, Detroit 7
Griffin, Robert J..........17401 Mack Ave., Detroit 24
Griffiths, Sydney J.....15400 Plymouth Rd., Detroit 27
Grimaldi, Gregory J. (A)....2983 Seminole, Detroit 14
Grinstein, Alexander......18466 Wildemere, Detroit 21
Grishkoff, M. A...........2201 E. Jefferson, Detroit 7
Griva-Lizlovs, S...........29901 Ford Rd., Garden City
Grob, Otto (A)......515 E. Sola, Santa Barbara, Calif
Gronemeyer, Wm. H............1800 Tuxedo, Detroit 6
Grossman, Solomon C...........26339 Woodward Ave., Huntington Wds.
Gudes, David S...........1080 Fisher Bldg., Detroit 2
Guerrero, Jose..............13700 Woodward, Detroit 3
Guidot, Julian M.......13345 W. McNichols, Detroit 35
Guimaraes, Abilio S. (L)..7301 Schaffer Hwy., Dearborn
Guinan, Geo. E. (L)..........5012 Howe Rd., Wayne

Guindi, Mounir F.....21261 Ridgedale Dr., Oak Park 37
Guindi, Sami F..........1080 Fisher Bldg., Detroit 2
Gulick, Arthur E...............4160 John R, Detroit 1
Gurdjian, Elisha S.....1553 Woodward Ave., Detroit 26
Gurskis, Eugenia E.........504 Kales Bldg., Detroit 26
Gustafson, David C..........4171 Seminole, Royal Oak
Gutow, Benjamin R...............20867 Mack, Detroit
Guyton, Jack S.........2799 W. Grand Blvd., Detroit 2
Hacker, Elaine M.....26 Christine Dr., Gro. Pte. Farms
Hackert, John L.......14551 Southfield Rd., Allen Park
Haddad, Benjamin F.........1010 Mich. Mutual Bldg., Detroit 26
Haddad, Elias D.............17830 E. Warren, Detroit
Hadesman, Donald..........985 E. Jefferson, Detroit 7
Hadjimihaloglu, B. S.....2429 E. Milwaukee, Detroit 11
Haefele, Leslie P.........29108 Ford Rd., Garden City
Hagermoser, H. H. (A)....6126 Yorkshire, Detroit 24
Hagge, Donald R.....29594 W. Five Mile Rd., Livonia
Haidostian, B. H.........18456 Grand River, Detroit 23
Haines, Ellen R.................525 Seyburn, Detroit
Haitinger, K. S...........22175 Thorofare, Grosse Ile
Haking, Leonard......14014 E. 7 Mile Rd., Detroit 5
Halekas, G. Peter....21727 Mack Ave., St. Clair Shores
Hall, Arch H...................10 Peterboro, Detroit 1
Hall, E. Walter (L)....14189 Rosemont Rd., Detroit 23
Hall, Ralph E. (L)..........10 Peterboro St., Detroit 1
Hall, Richard H.............828 Fisher Bldg., Detroit 2
Hall, Winthrop D.........5237 Oakman Blvd., Dearborn
Hallen, Leonard J............1335 Nicolet Pl., Detroit 7
Hamburg, Robt. H...1515 Dav. Whitney Bldg., Detroit
Hamburger, Albert C.....13345 W. McNichols, Detroit
Hamburger, Stuart W...18400 Schaefer Hwy., Detroit 35
Hamil, Brenton M.........Henry Ford Hosp., Detroit 2
Hammer, Edwin J.........16616 Mack Ave., Detroit 24
Hammer, Roy W.......11455 E. McNichols, Detroit 35
Hammond, Arthur E. (L)......1553 Woodward Ave., Detroit 26
Hammond, James L. (L)..............1006 Morse St., Oceanside, Calif.
Handel, Jack E.................1800 Tuxedo, Detroit 6
Hank, Emil J...........32316 Grand River, Farmington
Hansen, Fredk. E. (L)..18160 Birwood, W. Beverly Hills, Birmingham
Hansen, John W. (R)........8877 Perrin Dr., Livonia
Hanyi, Karl................7645 Thornwood, Plymouth
Hardstaff, R. John (L)....648 Neff Rd., Grosse Pte. 30
Hardt, Barbara A...........15867 Mansfield, Detroit 27
Hardy, Clarence M...........23019 Ecorse Rd., Taylor
Hardy, Geraldine M.............18145 Mack, Detroit 24
Hardy, Warren G...801 Dav. Whitney Bldg., Detroit 26
Harelik, Ely W.......Det. House Correction, Plymouth
Harkaway, Roman W........19125 Van Dyke, Detroit 34
Harley, Garth H..........451 Golfcrest Dr., Dearborn
Harley, Louis M.....4100 W. McNichols Rd., Detroit 21
Harm, Winfred B. (L)........16260 Cherrylawn Ave., Detroit 21
Harmon, Edwin L.........441 E. Jefferson, Detroit 26
Harmon, Walter, Jr.........2510 E. Davison, Detroit 12
Harnett, R. W. F...........529 Fisher Bldg., Detroit 2
Harper, Jesse T...1252 Dav. Whitney Bldg., Detroit 26
Harrington, Edw. B.....14853 Michigan Ave., Dearborn
Harrington, F. L.......14044 W. McNichols, Detroit 35
Harris, A. D.................12815 Linwood, Detroit 38
Harris, Donald M. (A)........490 Griswold, Northville
Harris, Harcourt G.........9141 Dexter Blvd., Detroit 6
Harris, Harold H...8011 W. Vernor Highway, Detroit 9
Harris, Ivor D.....1245 David Whitney Bld., Detroit 26
Harrity, William A..302 Eastland Prof. Bldg., Detroit 36
Hart, Charles E...........23845 Van Dyke, Centerline
Hart, John C.................9341 Moffat, Detroit 13
Hart, Zwi H..........Plymouth State Home, Northville
Hartkop, Henry H.........20055 Mack Ave., Detroit 36
Hartquist, Robt. J...........1495 Fort St., Wyandotte
Hartzell, John B.....7815 Jefferson Ave. E., Detroit 14
Hartzell, John M.........7815 E. Jefferson, Detroit 15
Hasegawa, Carl M...1400 Chrysler Expwy., Detroit 48207
Hasley, Clyde K. (L)........2320 N. LaSalle Gardens, Detroit 6
Hasley, Danl. E. (R)......16512 Shaftsburg, Detroit 19
Hassett, Gerald R...........St. Marys Hospital, Livonia
Hassig, Walter W.............20914 Kelly, East Detroit

Hastings, Orville J.......15744 Harper Ave., Detroit 24
Haszczye, Vladimir A...........3329 Yemana, Detroit 7
Hathaway, Hubert R. (A).........154 Englewood Rd., Springfield, Ohio
Haubrich, Wm. S.........Henry Ford Hosp., Detroit 2
Hause, Glen E.........18520 Grand River, Detroit 23
Hauser, I. Jerome..........7411 Third Ave., Detroit 2
Hauser, John E.....405 Northland Med. Bldg., Southfield
Hauser, Maurice J. (A)....7411 Third Ave., Detroit 2
Havers, Howard (L)....271 Kenwood Ct., Detroit 36
Hawkins, James W. (L)..........3885 Prudenee Drive, Sarasota, Fla.
Hayden, Royal C., Jr.....Henry Ford Hospital, Detroit 2
Hayes, Allen L.................19207 Schaefer, Detroit
Hazen, Roy S.....20526 Grand River Ave., Detroit 19
Heath, Leonard P.....1553 Woodward Ave., Detroit 26
Heavner, Lyle E.......119 Kercheval, Grosse Pointe 36
Heenan, Theophilus H...1553 Woodward Ave., Detroit 26
Heideman, Louis E.....20211 Greenfield Rd., Detroit 35
Heil, Edward R...........19190 Greenfield, Detroit 35
Heins, Marilyn..........747 Lakeland, Grosse Pte. 30
Heldt, Richard F.........1951 Monroe Blvd., Dearborn
Heldt, Thos. J. (L)......17 Poplar Park, Pleasant Ridge
Helman, Norman....15001 W. Eight Mile Rd., Detroit 35
Hendelman, Manuel H.........17141 Hayes, Detroit 5
Henderson, Allison B.......9041 Dexter Blvd., Detroit 6
Henderson, Arthur B. (L)..10452 Mack Ave., Detroit 14
Henderson, Chas. W...20905 Greenfield Rd., Southfield
Henderson, Frederic C.....18101 E. Warren, Detroit 24
Henderson, Harold (L)..20905 Greenfield Rd., Southfield
Henderson, Hugh W.......18101 E. Warren, Detroit 24
Henderson, Leslie T. (L)..14814 E. Warren, Detroit 15
Henderson, Wm. E. (L)..18101 E. Warren, Detroit 24
Hendra, Alan K...............15540 Harper, Detroit 24
Henig, Fred N.....7605 W. Seven Mile Rd., Detroit 21
Henkin, Raymond............17228 Shervilla, Southfield
Henkin, Wm. A...........18215 Greenfield, Detroit 35
Hennessey, Alan T...........Grace Hospital, Detroit 35
Henrieh, Laurenee E...18239 W. Seven Mile Rd., Detroit
Henry, Robert C...............1 Lafayette Pl., Detroit
Herbst, Harold B.......7282 Riverstone Rd., Birmingham
Hergt, Klaus............30320 Pondsview Dr., Franklin
Herrero, Eduardo M...21913 Canterbury, Grosse Ile 48138
Herrero, Eduardo U...21845 Canterbury, Grosse Ile 48138
Herrold, Rose E.......1277 E. Grand Blvd., Detroit 11
Herschelmann, Roy F.......3343 Gratiot Ave., Detroit 7
Hershey, Ernest A., Jr...307 Dav. Whitney Bldg., Detroit
Hertzler, Jack H.......3011 W. Grand Blvd., Detroit 2
Herwick, John T.......2799 W. Grand Blvd., Detroit 2
Hess, Joseph W.............Harper Hospital, Detroit 1
Hess, Murray W.................30650 Bruce, Franklin
Hessburg, Philip C.......Henry Ford Hospital, Detroit 2
Heyman, Louis F...19009 W. Seven Mile Rd., Detroit 19
Heyner, C. S.........28 W. Adams Avenue, Detroit 26
Heyner, Fredk. J...........3424 Oakman Blvd., Detroit
Heyner, Stanley A.......3424 Oakman Blvd., Detroit 4
Hickey, Jos. (L)..........23100 Cherry Hill, Dearborn
Hicks, Fredk. G...........1000 Westwood, Birmingham
High, Robert H...........Henry Ford Hosp., Detroit 2
Higuera, J. Gilberto....13700 Woodward Ave., Detroit 3
Hildner, Frank J.........Henry Ford Hosp., Detroit 2
Hill, Edward J., Jr...949 Dav. Whitney Bldg., Detroit 26
Hill, Raymond D.........14551 Southfield, Allen Park
Hill, Welford T...............6303 Mack Ave., Detroit
Hillenberg, Sidney J.....19350 W. 7 Mile Rd., Detroit 19
Hiller, Glenn I.........13700 Woodward Ave., Detroit 3
Hillyer, John W.......26151 Huron River Dr., Flat Rock
Hilton, Wm. E. (L)..........5013 Harding, Detroit 13
Hinchman, D. F.........27459 Five Mile Rd., Livonia
Hipps, Chauncey J...2605 West Grand Blvd., Detroit 8
Hirsch, Leo J.........15800 W. McNichols, Detroit 35
Hirsch, Lore.................212 S. Melborn, Dearborn
Hirschfeld, A. H...............3790 Woodward, Detroit
Hoagland, F. L...........2240 W. Grand Blvd., Detroit
Hobbs, Donald V...27305 Southfield Rd., Lathrup Village
Hochman, Morton M...16633 Plymouth Rd., Detroit 27
Hodges, Jason..........26401 Harper, St. Clair Shores
Hodgkinson, Chas. P...........17546 Meadwood Ave., Lathrup Village
Hoffer, Thos...............5825 Allen Rd., Allen Park
Hoffman, Ben G.........19545 Shrewsbury, Detroit 21
Hoffman, Edward A.....7615 W. Vernor Hwy., Detroit 9
Hoffman, Edwin S. (R)........8106 E. Jefferson Ave., Detroit 14
Hoffman, Harry Y...15085 E. Seven Mile Rd., Detroit 5
Hoffman, Henry A.....10015 E. Outer Dr., Detroit 24
Hoffman, Louis........18203 Birchcrest Dr., Detroit 21
Hoffman, Milton C.......18555 E. Warren, Detroit 36
Hogikyan, Azat........16901 W. McNichols, Detroit 35
Holdredge, Jean M.....3011 W. Grand Blvd., Detroit 2
Hollander, Abraham J...14327 Michigan Ave., Dearborn 2
Hollinger, F. Wayne....8265 Gen. Mtrs. Bldg., Detroit 2
Hollis, Henry B..............6809 Sirena, Detroit 10
Holloway, Janet L...............7430 Second, Detroit 2
Holmes, Geo. F.........14729 Champaign, Allen Park
Holt, Chas. J., Jr.....1210 S. Oxford, Grosse Pointe 30
Holt, Henry T...............5050 Cass St., Detroit 2
Homeister, Eugene A...........12925 Pennsylvania Ave., Wyandotte
Honhart, Fred L. (L)............1405 Berkshire Road, Grosse Pointe 30
Hopkins, Andrew J.............4407 Roemer, Dearborn
Hopkins, George C...............3183 Mack, Detroit 7
Hopkins, Scovell M...910 Dav. Broderick Twr., Detroit
Horkins, Earl J.........10963 Farmington Rd., Livonia
Horn, Robt. C., Jr.....2799 W. Grand Blvd., Detroit 2
Hornbeck, Robert J.......31500 Schoolcraft Rd., Livonia
Horny, Hugo O.........619 Barrington Rd., Detroit 30
Horrell, Eugene D.........1408 Kales Bldg., Detroit 26
Horton, Reeee H...606 Northland Med. Ctr., Southfield
Horvath, James J.......1553 Woodward Ave., Detroit 26
Horvitz, Victor S.......18400 Schaefer Hwy., Detroit 35
Hotchkiss, Loris M...........33220 W. 7 Mile, Livonia
Howard, Philip J.........Henry Ford Hosp., Detroit 2
Howard, William K.............1800 Tuxedo, Detroit 6
Howell, Bert F.........10800 Whittier Rd., Detroit 24
Howell, James T.......2799 W. Grand Blvd., Detroit 2
Howes, Homer A...1515 Dav. Whitney Bldg., Detroit 26
Howlett, Howard T.........868 Fisher Bldg., Detroit 2
Hoyos, Pedro G.....6085 Campus Dr., Dearborn Heights
Hromadko, Louis (L)......1053 Fisher Bldg., Detroit 2
Hubbard, John P., Jr.........14620 E. Seven Mile Rd., Detroit 5
Huber, Philip J...............1724 Bassett, Royal Oak
Hudson, J. Stewart (L)........17443 E. Jefferson Ave., Grosse Pointe 30
Hudson, Wm. A. (L)....502 S. Pine, Harrison, Arkansas
Hudspeth, E. Rae..........753 Fisher Bldg., Detroit 2
Huebl, Hubert G.......Detroit Receiving Hosp., Detroit
Huegli, Wilfred A.....16840 E. Warren Ave., Detroit 24
Huggins, H. Horne............8355 Gratiot, Detroit 13
Hughes, Calvin H.........19959 Vernier, Harper Woods
Hughett, Arthur J.........19959 Vernier, Harper Woods
Hulick, Archie G.................1600 Tuxedo, Detroit
Hull, LeRoy W. (L)........6364 Cowell Rd., Brighton
Hullerman, Hugo V.......Childrens Hospital, Detroit 2
Hume, H. Ross, Jr.........1553 Woodward, Detroit 26
Huminski, Thaddeus S...19244 Van Dyke Ave., Detroit 34
Hummel, Arthur R...1020 3 Mile Dr., Grosse Pointe 30
Hunt, Theodore H.....19431 Van Dyke Ave., Detroit 34
Hunt, Verne G.......1553 Woodward Ave., Detroit 26
Hunter, Donald G.........3245 E. Jefferson, Detroit 17
Hunter, Robert B.........Henry Ford Hosp., Detroit 2
Husband, Chas. W. (L)..14500 W. McNichols, Detroit
Husband, Raymond C...14500 W. McNichols, Detroit 35
Hutchins, M. Colton....3011 W. Grand Blvd., Detroit 2
Hyatt, Jarvis M.........22340 Michigan Ave., Dearborn
Hyde, Fredk. W., Jr...........Grace Hospital, Detroit 1
Hyland, John R...............17200 Mack, Detroit 24
Hymes, Alan C.................V.A. Hospital, Dearborn
Hysni, Aliqemal......8031 W. Vernor Hwy., Detroit 9
Iacobell, Peter H...........19300 Van Dyke, Detroit 34
Iacobellis, M.........22159 W. Outer Drive., Dearborn
Ice, Garnet T.................18060 Conant, Detroit 34
Iglesias, Luis J..........20211 Greenfield, Detroit 35
Igna, Eli J.............2799 W. Grand Blvd., Detroit 2
Ignagni, Antonio..............21470 Sloan Dr., Detroit
Imamoglu, Kamil......Detroit General Hosp., Detroit 26
Indenbaum, Samuel....18400 Schaefer Hwy., Detroit 35
Ine, Myung Yul................1800 Tuxedo, Detroit 6
Ingberg, Harry O.................261 Brady, Detroit 1
Irvin, Earle A...Ford Motor Co., American Rd., Dearborn

Irwin, Wm. A.............16001 9 Mile Rd., Southfield
Isaacson, Arthur (L)........18989 San Juan, Detroit 21
Isaacson, Harold E.........15361 Plymouth Rd., Detroit
Isaacson, Jo. D.......26008 Pembroke, Huntington Wds.
Israel, Barney B.............663 Fisher Bldg., Detroit 2
Israel, Kenneth........10607 W. 7 Mile Rd., Detroit 21
Itkin, H. David............2900 S. Fort St., Detroit 17
Iwata, Herbert T.........7611 Patton Ave., Detroit 28
Izner, Bernice.................660 Whitmore, Detroit
Izner, Sanford M.......17500 Schaefer Hwy, Detroit 35
Jacknow, David..............60 W. Hancock, Detroit 1
Jackson, Franklin R. (A)..16236 Lawton, Detroit 48221
Jackson, Winston B...........2425 Oakman, Detroit 38
Jacobs, Howard............18241 Greenfield, Detroit 35
Jacobson, Lyle F...........5224 St. Antoine, Detroit 2
Jacobson, Saml. D.......Wayne Co. Genl. Hosp., Eloise
Jacobus, Wayne N.....20055 Mack Ave., Grosse Pte. 36
Jaeger, Grove A..............11711 Minden, Detroit 5
Jaekel, Clarence N. (L)..1086 E. Grand Blvd., Detroit 7
Jaffar, Donald J...........671 Fisher Building, Detroit
Jaffe, Harold W...1706 David Whitney Bldg., Detroit 26
Jaffe, Jacob............2211 Woodward Ave., Detroit 1
Jaffe, Louis................18662 Muirland, Detroit 21
Jahsman, Wm. E. (R)..1410 Sunset Dr., Clearwater, Fla.
Jakacki, Richard Wm..........36157 Sherwood, Livonia
James, Thomas N.........Henry Ford Hosp., Detroit 2
Jamieson, Thos. J.............1447 S. Indian Summer,
West Covina, Calif.
Janicki, Natalia J....................Eloise Hosp., Eloise
Jarre, Hans A. (L)..........Grace Hospital, Detroit 1
Jarvis, Harold F...............360 Moross, Detroit 36
Jasion, Lawrence J. (A)......11945 Payton, Detroit 24
Jaynes, Richard V.........29901 Ford Rd., Garden City
Jeffries, Benj.........19959 Vernier Rd., Harper Woods
Jend, Wm., Jr..............1365 Cass Ave., Detroit 26
Jend, Wm. J. (L)......12781 E. Outer Dr., Detroit 24
Jenkins, Elwood A...610 Dav. Whitney Bldg., Detroit 26
Jennings, Chas G.........17700 Mack Ave., Detroit 24
Jensen, Viggo W.........17850 Maumee, Detroit 48230
Jevons, William H.......8425 Twelve Mile Rd., Warren
Jewell, F. C.................7220 Gratiot Ave., Detroit
Jewell, John S.......2021 Monroe, Suite 203, Dearborn
Jewell, Marvin R...........Childrens Hospital, Detroit 2
Jocz, Marion W...........945 Trombley Rd., Detroit 30
Jodar, Emery O............15760 Mack Ave., Detroit 24
Jodar, Loyal W.........18412 Mack, Grosse Pointe 36
John, Hubert R. (L)......20905 Greenfield, Southfield
Johnson, Aran S.....642 Blairmoor Ct., Grosse Pte. Wds.
Johnson, Arthur J.......Henry Ford Hospital, Detroit 2
Johnson, Gage............2785 S. Fort St., Detroit 27
Johnson, Homer L. (R)..2799 W. Grand Blvd., Detroit 2
Johnson, Simon O.
Johnson, Thos. D.......18530 Grand River, Detroit 23
Johnson, Verne E.........2051 Monroe Ave., Dearborn
Johnson, Vernon P...23127 Harper Ave., St. Clair Shores
Johnson, Wilbur E.............14654 Gratiot, Detroit 5
Johnson, Wm. H. M. (L)..7157 63 Michigan, Detroit 10
Johnston, Everett V. (L)..........30130 Bristol Lane,
Birmingham
Johnston, Herbert C.........3001 Miller Rd., Dearborn
Johnston, Jos. A..........Henry Ford Hosp., Detroit 2
Johnston, Wm. E. (L)..3011 W. Grand Blvd., Detroit 2
Johnstone, Benj. I...........555 Fisher Bldg., Detroit 2
Joinville, Euclide V. (L)....1202 Stroh Bldg., Detroit 26
Jones, Arnold M.............3706 Sturtevant, Detroit 6
Jones, G. Richard........18412 Mack Ave., Detroit 36
Jones, Roy D. (L)......10234 Puritan Ave., Detroit 38
Jones, Wm. J...............8209 Allen Rd., Allen Park
Joos, Thad. H.........20867 Mack, Grosse Pte. Woods
Jordan, Prescott, Jr.........5224 St. Antoine, Detroit 2
Jordan, R. Gerald...........12410 Van Dyke, Detroit 34
Joseph, Ramon R.......Wayne Co. Gen. Hospital, Eloise
Joyce, Stanley J...........1078 Fisher Bldg., Detroit 2
Joyrich, Myron H.............Sinai Hospital, Detroit 35
Juliar, Benj...........17305 Muirland Ave., Detroit 21
Jungwirth, R. V.....19350 W. McNichols Rd., Detroit 19
Kackley, James E..............18495 Mack, Detroit 36
Kain, Thomas R.....1400 Chrysler Exp. Way, Detroit 7
Kaine, Henry D.........3011 W. Grand Blvd., Detroit 2
Kalayjian, Bernard S.......30676 Harlincin Ct., Franklin
Kalichman, Nathan........19304 Wyoming, Detroit 21
Kallenbach, Rudolf W.........388 Inkster Rd., Inkster
Kallet, Herbert I. (L)......651 Fisher Bldg., Detroit 2
Kallet, Maerit B................1800 Tuxedo, Detroit 6
Kallman, David (L)....2351 W. Grand Blvd., Detroit 8
Kallman, Leo...........2351 W. Grand Blvd., Detroit 8
Kallman, Reuben R.....2631 Woodward Ave., Detroit 1
Kambouris, Angelow A.......744 Dav. Whitney Bldg.,
Detroit
Kamil, Richard S...........14438 McNichols, Detroit 35
Kandel, Robert F.......Henry Ford Hospital, Detroit 2
Kane, Archibald V.......22248 Nottingham, Birmingham
Kansa, Selma.............19431 Van Dyke, Detroit 34
Kanter, Herman..........980 Whitmore, Detroit 48203
Kapetansky, Don I..............17376 Schaefer, Detroit
Kapetansky, Nathan J.....17376 Schaefer, Detroit 48235
Kaplita, Walter A...60 Fontana Lane, Grosse Pte. Shores
Kapphahn, K. H............Henry Ford Hospital, Detroit
Kaprielian, M..........15800 W. McNichols Rd., Detroit
Karadeloglou, B............817 Virginia Park, Detroit 2
Karamatas, Philip C.........10822 W. Warren, Dearborn
Karch, Saul.................18080 Muirland, Detroit 21
Kasabach, Harry Y.....1553 Woodward Ave., Detroit 26
Kasabach, Vahram Y.......1814 Book Tower, Detroit 26
Kashtan, Harry A.......15201 W. McNichols, Detroit 35
Kasper, Jos. A. (L)..1011 Cadieux Rd., Grosse Pte. Pk.
Kaspor, Albert J.........20901 Moross Rd., Detroit 36
Kass, Arnold.........1316 David Stott Bldg., Detroit 26
Katz, Lawrence.............987 E. Jefferson, Detroit 7
Katz, Martin.....................7300 Harding, Taylor
Katzman, Harold L............856 Fisher Bldg., Detroit
Katzman, Irving S..............412 Fox Bldg., Detroit 1
Kaufman, Jack H.........10234 W. 7 Mile Rd., Detroit
Kaufman, Louis W.....10326 W. Seven Mile, Detroit 21
Kaufman, William H.....10149 Michigan Ave., Dearborn
Kawchak, James.............Ford Motor Co., Dearborn
Kawecki, Lucian....10734 Hart Ave., Huntington Woods
Kawel, Conrad A., Jr.....10955 Farmington Rd., Livonia
Kazdan, Morris.............4619 Allen Road, Allen Park
Keemer, Edgar B., Jr.,....8256 Grand River, Detroit 1
Kehoe, Henry J............15252 Gratiot Ave., Detroit 5
Keith, Rachel H. C. B.........5050 Joy Rd., Detroit 4
Kelin, Maximilian....8233 W. Chicago Blvd., Detroit 4
Kelley, Frank J................853 Fisher Bldg., Detroit
Kelly, A. P., Jr...........Henry Ford Hosp., Detroit 2
Kelly, Edward W., Jr.........156 Harmon St., Detroit 2
Kelly, John J..............14729 Champaign, Allen Park
Kelly, L. J....................14015 Gratiot, Detroit 5
Kelmenson, Victor A...........7356 12th St., Detroit 6
Kelson, Malcolm J............1045 Harvard, Detroit 30
Kennary, James M.......4900 Cadieux Rd., Detroit 24
Kennary, James M., Jr.....4900 Cadieux Rd., Detroit 24
Kennedy, Chas. S. (L).........459 Fisher Bldg., Detroit
Kennedy, Donald J.....27030 Kingswood Dr., Dearborn
Kermath, James E.........15101 Southfield, Allen Park
Kernick, Melvin O.............13700 Woodward Ave.,
Highland Park 3
Kerwin, George R.....22149 Chatsford Cir., Southfield
Kessel, Karl J...326 Estld. Prof. Ctr. Bldg., Harper Woods
Kessler, Chas..............18241 Greenfield, Detroit 35
Keyes, John W..........Henry Ford Hosp., Detroit 2
Killins, Chas. G............8100 E. Jefferson, Detroit 14
Kimberlin, K. K., Jr...11110 Morang Drive, Detroit 24
King, Edward D. (L)..270 Rivard Blvd., Grosse Pte. 30
King, Melbourne J.....5435 W. Vernor Hwy., Detroit 9
Kingswood, Roy C.........1078 Fisher Bldg., Detroit 2
Kitzmiller, John L...15800 W. McNichols Ave., Detroit 35
Klaiber, Roger G.............1541 Edsel Drive, Trenton
Klein, Herman..............5030 Wallbrook, Birmingham
Klein, Howard A...1846 Dav. Whitney Bldg., Detroit 26
Klein, Sander P...14825 W. McNichols Rd., Detroit 35
Klein, Wm..................13965 Linwood, Detroit 38
Kleinman, Shmarya (L)........1800 Tuxedo, Detroit 6
Kliger, David..............7756 Southfield, Detroit 28
Klimchuk, M. M.........22770 Kelly Rd., East Detroit
Klimkowski, Edw. J.........17301 W. Eight Mile Rd.,
Detroit 48235
Kling, George A.............Harper Hospital, Detroit 1
Kling, Murray G.....13320 Winchester, Huntington Wds.
Klosowski, Jos. (R)..8222 E. Outer Drive, Detroit 13
Kluck, Clarence J.........25210 Grand River, Detroit 40
Klutke, Geo. H. E.............2841 Monroe, Dearborn

Knaggs, Earl J. . . . . .2387 Fort St., Wyandotte
Knapp, Floyd B. (R). .Box 468, R. 1, Houghton Lake
Knapp, Gary H. . . . . .23611 Goddard, Taylor
Knapp, Gordon R. (R). . . .422 W. Goldengate, Detroit 3
Knapp, Wm. L. . . . . . .27740 Devonshire Dr., Southfield
Knighton, Robt. S. . . . . . .2799 W. Grand Blvd., Detroit 2
Knobloch, Edmund J. (L). .5933 Chene St., Detroit 11
Knopf, Merrill M. (A). .Detroit Receiving Hosp., Detroit
Knox, Ross M. . . . . .3180 Fort St., Lincoln Park
Kobernick, Sidney D. . . . .6767 W. Outer Dr., Detroit 35
Kobiljak, Stefan H. . . . . . .3516 Fort Street, Lincoln Park
Koebel, Raymond H. .640 Bedford Lane, Grosse Pointe 30
Koek, Hans J. . . . . .23100 Cherry Hill, Dearborn
Koerber, Edward J. . . . . . .4876 Lakeview Ave., Detroit 15
Kogan, Natalio. . . . . .Sinai Hospital, Detroit 35
Kogut, Constantine S. . . . . .10627 Puritan, Detroit 38
Kokowicz, Raymond J. . . . .19440 Van Dyke, Detroit 34
Kolman, Isadore I. . . . . .1800 Tuxedo, Detroit 6
Komisaruk, Richard. . . . . . . .1575 E. Lafayette, Detroit 7
Kondomerkos, John D. . .33020 Palmer Road, Wayne 48184
Kopf, George M. (A). . . .Detroit General Hosp., Detroit
Kopmeyer, Joe M., Jr. . . . . . .17632 Grandville, Detroit 19
Koran, Valentine L. . . . . . .1306 Kales Bldg., Detroit 26
Koren, Louis. . . . . . . .1300 Gadillac Sq. Bldg., Detroit 26
Kornacki, Thomas E. . . . .719 New Genter Bldg., Detroit 2
Korum, Lyle W. . . . . . .18585 E. Warren St., Detroit 36
Koschnitzke, H. K. . . . . .15101 Southfield, Allen Park
Kossayda, Adam W. . . . .15324 Michigan Ave., Dearborn
Kovach, Emery P. . . . . .9750 Ghalmers, Detroit 13
Kovan, Dennis D. . . . . .16965 Hamilton Ave., Highland Park 3
Kowaleski, John J. . . . . .12789 Veronica, Southgate
Kozlinski, Anthony E. . .2195 E. Grand Blvd., Detroit 11
Krabbenhoft, K. L. . . . . .3825 Brush St., Detroit 1
Kraft, Raymond B. (R). . . . . .700 S. Ocean Blvd., Boca Raton, Fl.
Kraft, Ruth M. . . . . . .19164 Devonshire Rd., Birmingham
Krakauer, Bernard. .17716 W. Seven Mile Rd., Detroit 35
Krass, Edward W. . . . . . .11088 Gratiot Ave., Detroit 13
Kraus, John J. . . . . . .16840 E. Warren Ave., Detroit 24
Krawec, Charles J. . .Mt. Carmel Mercy Hosp., Detroit 35
Krebs, Wm. T. . . . . . .16419 E. Warren Ave., Detroit 24
Kreinbring, Geo. E. . . . .14295 E. 7 Mile Rd., Detroit 5
Kretzschmar, John C. . . . .660 E. Grand Blvd., Detroit 7
Krevsky, David A. . . . . .8449 Park, Allen Park
Krevsky, Harold. . . . . .8449 Park Avenue, Allen Park
Krieg, Earl G. . . . . .757 Middlesex, Gros. Pte. Pk. 30
Krieger, Harley L. (R). .11390 Strathmoor, Detroit 27
Krieger, Harvey. . . . . .954 Fisher Bldg, Detroit 2
Krieger, Ingeborg (A). .13112 Ladlow, Huntington Wds.
Kristen, Karl T. . . . .Mt. Carmel Mercy Hosp., Detroit 35
Kritchman, Maurice J. . . . . .10 Witherell St., Detroit 26
Kroha, Lawrence A. . . . .15124 Kercheval Ave., Detroit 30
Krohn, Lawrence H. .24340 W. McNichols Rd., Detroit 19
Kroll, Harvey V. . . . . .7815 E. Jefferson, Detroit 14
Krynicki, Francis X. . . . . . .15101 W. 7 Mile, Detroit 35
Krystal, Henry. . . . . .19210 Coyle, Detroit 35
Kubanek, Jos. L. (L). . . . . .23134 Myrtle, Dearborn
Kucmierz, Francis S. . .18934 Van Dyke Ave., Detroit 34
Kuehn, Ned N. . . . . . .20203 Wellesley Blvd., Birmingham
Kuhn, Albert A. . . . . . .635 W. Seven Mile Rd., Detroit 3
Kuhn, Henry H. . . . . . .635 W. Seven Mile Rd., Detroit 3
Kuhn, Richard F. . . . . .1700 Junction Ave., Detroit 9
Kujawski, Walter F. . .17800 E. Eight Mile Rd., Detroit
Kullman, Harold J. . . . . .930 Beechmont, Dearborn
Kuran, Lionel V. . . . . .14853 Michigan, Dearborn
Kurcz, Jos. A. . . . . .7433 Michigan Ave., Detroit 10
Kurtz, Irvin J. . . . . .25210 Grand River, Detroit 40
Kurtzman, Raymond S. . . . . .Detroit Memorial Hosp., Detroit 26
Kutsche, John D. . . . . .3794 Fort St., Trenton
Kvietys, Benj. . . . . .27235 Joy Rd., Dearborn
Kwasiborski, S. A. . . . . .2300 Oak St., Wyandotte
Kyle, Wm. V., Jr. . . . . .4741 Spokane, Detroit
Laberge, James M. . . . . .100 Oak, Wyandotte
Labes, James. . . . . .15101 W. McNichols, Detroit
Labsan, H. F. . . . . .Henry Ford Hospital, Detroit 2
Lackey, Lawrence S. . . . . .525 Visger, Ecorse
La Groix, George E. . .695 Vaugham Rd., Bloomfield Hills
Laderach, David C. . . . . .1704 Iroquois, Detroit 14
Lafata, Philip J. . . . . .15260 Levan Rd., Livonia
La Ferte, Alfred D. (L). .520 St. Glair, Grosse Pte. 30
Laham, M. M. . . . . .2929 Fort St., Wyandotte
Lahood, Michael J. . . . . .20001 Greenfield, Detroit 35
Laige, Raymond J. . . . . .P.O. Box 1259, Detroit 31
Lajoie, Louis J. . . . . .601 Piquette, Detroit 2
Lakatos, George G. . . . . .33020 Palmer, Wayne
Lake, Robt. C. . . . . .8445 E. Jefferson, Detroit 14
Lakin, Alan C. . . . .10326 W. Seven Mile Rd., Detroit 21
Lakin, Mervyn H. . . . . . .17555 James Couzens, Detroit 35
Lakoff, Chas. B. (L). . . . . . . .10244 W. Seven Mile Rd., Detroit 21
Lam, Conrad R. . . . . . .28130 Westbrook Gt., Farmington
Lamberson, Frank A. . . . .19001 Grand River, Detroit 23
Lammy, James V. . .748 Dav. Whitney Bldg., Detroit 26
Lamont, Richard L. . . . . .3815 Pelham Rd., Dearborn
Lamontagne, Gaetan. . . . . .14801 Southfield, Allen Park
Lampman, Harold H. (L). . . . . . . .3011 W. Grand Blvd., Detroit 2
Landers, Maurice B. . . . .275 W. Grand Blvd., Detroit 16
Lang, Ernst F. . . . . .3790 Woodward, Detroit 1
Lange, Wm. A. . . . . .3790 Woodward Ave., Detroit
Langston, John D. . . . . . .1420 St. Antoine St., Detroit 26
Laning, Geo. M. (L). . . . . .R. D. Morey Rd., Sharon, Gonnecticut
Lansing, Eugene H. . . . . .33020 Palmer Rd., Wayne
Lansky, Mandell. . . . . .16339 E. Warren, Detroit 24
Large, Alfred M. . . . .701 Dav. Whitney Bldg., Detroit 26
Largo, Donald J. . . . . .16717 Warwick, Detroit 19
Larkin, Duane R. . . . . .28435 Plymouth, Livonia
Larned, Richard I. . . . . .15208 Bringard, Detroit 5
Larsen, Edward G. . . . . .1803 Trenton Dr., Trenton
Larson, Chas. J. . . . . .12729 Cunningham, Southgate
Larson, Francine S. . . . .18865 Haggerty Rd., Northville
Larsson, Bror H. (L). . . . . .81 E. Kirby Ave., Detroit 2
Lasichak, Andrew G. . . . .76 W. Adams Ave., Detroit 26
Lasley, James W. . . . .1014 David Whitney Bl., Detroit 26
Latimer, Fredk. R. . . . . .28 W. Adams, Detroit 26
Latteier, Karl K. . . . . . .15025 W. 8 Mile Rd., Detroit 35
Lauppe, Edward H. . . . .1553 Woodward Ave., Detroit 26
Lauppe, Fredk. A. . . . .1553 Woodward Ave., Detroit 26
Laura, Albert L. . . . . .9105 Harrison, Livonia
Laurisin, Eugene (L). . . . . .3019 W. 13 Mile, Apt. 413, Royal Oak
Lauter, Eric W. . . . . .1800 Tuxedo, Detroit 6
Lawand, Frank K. . . . . .952 David Whitney Bldg., Detroit 48226
Lawhead, Nixon R. (L). . . . . .19150 Kelly Rd., Detroit
Lawrence, Louis F. . . . . . .17300 Schaefer Rd., Detroit 35
Lawson, James M. . . . . . .2605 W. Grand Blvd., Detroit 8
Lawson, John W. (A). . . .98 Hazelwood Ave., Detroit 2
Lazar, Morton R. . . . . .20905 Greenfield, Southfield
Leach, David. . . . . .3011 W. Grand Blvd., Detroit 2
Leach, Robt. B. . . . . .1401 Rivard St., Detroit 7
Leach, Wendell L. . . . . .10811 E. Warren, Detroit 1
Leacock, Robt. C. . .440 University Pl., Grosse Pointe 30
Leader, Luther R. (L). .3535 W. 13 Mile Rd., Royal Oak
Leaver, L. Ross. . . . . . . .757 Lakewood Ave., Detroit 15
Lebamoff, Alexander T. . . . . . .7940 Allen Rd., Allen Park
Lechner, Monroe S. . . . . . .22770 Kelly Rd., East Detroit
Lecklider, A. F. (R). .848 Berkshire Rd., Grosse Pte. 30
Lee, Edith J. . . . . .150 Massachusetts, Detroit
Lee, Frank. . . . . .501 Meadowlane Dr., Dearborn
Lee, Harry E. (L). . . . . .13616 Gratiot Ave., Detroit 5
Lee, Pyong Tai. . . . . . . .26559 Grand River, Detroit 40
Leeser, Robert L. . . . .23100 Cherry Hill Rd., Dearborn
Lehmann, Robert N. . .26029 W. Five Mile Rd., Detroit 39
Leipsitz, Louis S. . . . . .3566 Cass Ave., Detroit 1
Leiter, Forrest C. . . . . .2355 Monroe, Dearborn
Leithauser, Danl. J. (L). . . . . .18412 Mack, Detroit 36
Leland, Solomon. . . . . .6563 Grand River, Detroit 8
Lemley, Clark F. . . . . . .3011 W. Grand Blvd., Detroit 2
Lemmon, Chas. E. (L). . . . . .1337 Dav. Whitney Bldg., Detroit 26
Lemon, Bruce K. . . . . .20905 Greenfield, Southfield
Lentine, James J. . . . . .15831 Mack Ave., Detroit 24
Lentz, Conrad L. (A). . . . . .Detroit Gen. Hosp., Detroit
Lenz, Willard R. . . . . .418 Moran Rd., Detroit 36
Lenzo, Joseph E. . . . . .951 E. Lafayette, Detroit 7
Lepard, Gecil W. . . . . . .1553 Woodward Ave., Detroit 26
Lepley, Fred O. (L). .19799 Mack Ave., Grosse Pte. Wds.
Lepley, Frederick J. . . . . .19803 Mack, Grosse Pte. 36

Lerman, Saml. I.............18330 Parkside, Detroit 21
Lerner, A. Martin........1400 Chrysler Exp., Detroit 7
Lerner, Leonard H...7310 W. Seven Mile Rd., Detroit 21
LeRoy, George V................1800 Tuxedo, Detroit 6
Lesesne, John M.....17700 Mack Ave., Grosse Pointe 24
Leslie, C. G..................8401 Woodward, Detroit 2
L'Esperance, Simon P. (R)..................Route 3, Woodslee, Ont., Canada
Lessem, David........12759 Vernon, Huntington Woods
Lester, Melvin A. (M)..T.U.S.L.O.G. Dept. 37, A.P.O., New York, N.Y. 09254
Leszynski, Jos. S. (L)..8120 E. Jefferson, Detroit 48214
Leucutia, Traian (L)...........10 Peterboro, Detroit 1
Levagood, Floyd B.....224 Professional Bldg., Detroit 1
Levant, Arthur B.........15715 E. Warren, Detroit 24
Levenson, Malcolm L...........24500 Custis, Southfield
Leventer, Ira........20211 Ann Arbor Trail, Dearborn
Levick, Walter G.........19959 Vernier, Harper Woods
Levin, David M. (A)................3505 E. Campbell, Phoenix, Arizona
Levin, Herbert G...........17300 Schaefer, Detroit 35
Levin, M. Mitchel..........20905 Greenfield, Southfield
Levin, Saml. J.........3011 W. Grand Blvd., Detroit 2
Levine, Edward E...12891 Sherwood, Huntington Woods
Levine, Sydney S. (A)........8233 W. Chicago Blvd., Detroit 4
Levitt, Irving............24535 N. Carolina, Southfield
Levitt, Nathan (L)........607 Kales Bldg., Detroit 26
Levy, David B.................29586 Fenkell, Livonia
Levy, Marvin B.......23200 Woodward Ave., Ferndale
Levy, Stanley H.......10601 Seven Mile Rd., Detroit 21
Lewin, Harry (L)........27012 Knob Woods, Southfield
Lewis, Benjamin M.............1401 Rivard, Detroit 7
Lewis, Chas. T. (L)..........5050 Joy Rd., Detroit 4
Lewis, Harvey Y...14219 W. McNichols Rd., Detroit 35
Lewis, J. Hugh............1543 Ford Ave., Wyandotte
Lewis, Lee A.........2730 E. Jefferson Ave., Detroit 7
Lewis, Robt. H.........17401 Roseland, Lathrup Village
Lewis, Wilfrid J.............10 Peterboro St., Detroit 1
Libbrecht, Robt. V.........6540 Park Ave., Allen Park
Licht, Robert................18215 Greenfield, Detroit
Lichter, Max L.........2900 Oakwood Blvd., Melvindale
Lichty, Dorman E...........7701 Wyoming, Dearborn
Liddicoat, Arthur G. (L)....20125 Fenkell, Detroit 23
Lie, Kim K...............1408 Kales Bldg., Detroit 26
Lieberman, Barnard L...19212 Woodward Ave., Detroit 3
Lightbody, James J.....1553 Woodward Ave., Detroit 26
Lignell, Rudolph W.........401 Northland Med. Bldg., Southfield
Liioi, Joseph A.......17000 W. 8 Mile Rd., Southfield
Lilly, Robert P.......29594 W. Five Mile Rd., Livonia
Lindner, David W...801 Dav. Whitney Bldg., Detroit 26
Linkner, Leonard S.............12944 La Salle Lane, Huntington Woods
Lipinski, Stanley L.....7540 Michigan Ave., Detroit 10
Lipkin, Ezra (L)........5715 Michigan Ave., Detroit 10
Lipnik, Carl E...........31610 Plymouth Rd., Livonia
Lipnik, Morris J.......17000 W. Eight Mile, Southfield
Lipsehutz, Louis S.....19750 Chesterfield Rd., Detroit 21
Lipson, Channing T.......20101 James Couzens, Detroit
Lipson, Madeleine L...........1800 Tuxedo, Detroit 6
Lipton, Raymond F...........10 Peterboro St., Detroit 1
Litsky, Abraham D.....1183 E. Grand Blvd., Detroit 11
Little, James W.....3637 Franklin Rd., Bloomfield Hills
Litwin, Jack A.....15121 W. McNichols Rd., Detroit 35
Litzenberger, D. J...........2429 Oakwood, Melvindale
Livingood, Clarence S.....345 University, Grosse Pte. 30
Livingston, W. C.............18060 Conant, Detroit 34
Lloyd, James R...1515 Dav. Whitney Bldg., Detroit 26
Lo, Lien Fu...................1800 Tuxedo, Detroit 6
Lo, Molly Tan..............Sinai Hospital, Detroit 35
Lockhart, Edward C.......7569 Tireman, Detroit 48204
Lockwood, Bruce C. (L)..........16208 Cumberland, Southfield 48075
Lofstrom, James E.............3601 W. 13 Mile Rd., Royal Oak 48072
Logrippo, Annie B.........Henry Ford Hosp., Detroit 2
Lohmann, Carl W...1229 Dav. Whitney Bldg., Detroit 26
London, Berton L...........18510 Meyers, Detroit 35
Long, Earl C. (L)........19751 James Couzens Hwy., Detroit 35
Long, John J.........15901 Greenfield Ave., Detroit 27
Longo, Salvatore..............468 Cadieux, Detroit 30
Loomis, John L...........236 Visger Rd., River Rouge
Loomus, Gerald N.......4100 W. McNichols, Detroit 21
Lopatin, Reuben..............1800 Tuxedo, Detroit 6
Loranger, C. B. P.............20825 Mack, Detroit 36
Loranger, Guy L.............34 Moross Rd., Detroit 36
Lorber, Jos. H.........873 Lakewood Ave., Detroit 15
Lorentzen, Edwin H. (L)......11702 Grand River Ave., Detroit 4
Lovas, Wm. S...........3180 Fort, Lincoln Park 48146
Love, Donald M.....11726 13 Mile Rd., Warren 48093
Love, James M.........16565 Bentler St., Detroit 48219
Lowe, Adolf W.......3338 W. Davison Ave., Detroit 38
Lowinger, Paul L...........951 E. Lafayette, Detroit 7
Lowrie, Wm. L. (L)..2799 W. Grand Blvd., Detroit 2
Luby, Elliot D...........19680 Roslyn Rd., Detroit 21
Lucas, Robert J.............771 Fisher Bldg., Detroit 2
Luck, Clyde A., Jr.....2401 E. 7 Mile Rd., Detroit 34
Lui, Alfred H. F.......Wayne Co. Gen. Hospital, Eloise
Lukas, John R...........18551 W. Warren, Detroit 28
Lumpkin, John G., Jr.....243 E. Warren Ave., Detroit 1
Lutz, Earl F. (R)..............2920 N. E. 55th St., Ft. Lauderdale, Fla.
Lutz, Sherwin J.......15121 W. McNichols, Detroit 35
Luz, Denis A.......Bon Secours Hospital, Grosse Pointe
Luzadre, John H.........18430 Mack Ave., Detroit 36
Lynn, David H.............Lynn Hospital, Lincoln Park
Lynn, Harvey D...........3815 Pelham Rd., Dearborn
Lytle, Robt. P.....402 Northland Med. Bldg., Southfield
Maben, Hayward C., Jr.............8840 Dexter Blvd., Detroit 48201
Mabley, John D.......1037 David Whitney, Detroit 26
Mac Craken, F. L. (A)....16753 St. Mary, Detroit 35
Mac Dougall, Orrin P...13700 Woodward Ave., Detroit 3
MacFarlane, Howard W. (L)......1553 Woodward Ave., Detroit 26
Mac Gregor, Wm. W. (L)....1111 N. Woodward Ave., Birmingham
Mack, Harold C.......3011 W. Grand Blvd., Detroit 2
Mack, Robert E...........Womans Hospital, Detroit 1
Mac Kenzie, Earle D. (L)....81 E. Kirby St., Detroit 2
Mac Kenzie, John W. (L)............289 Rivard Blvd., Grosse Pointe 30
Mackersie, Wm. G. (L)........18205 Roselawn Ave., Detroit 21
Mac Leod, Chas. W.....16345 W. McNichols, Detroit 35
MacMillan, Francis B...1553 Woodward Ave., Detroit 26
MacNeil, John J.......2075 E. 14 Mile Rd., Birmingham
Mac Pherson, K. C. (L)..8100 E. Jefferson, Detroit 14
Mac Queen, Malcolm D. (L)......660 Woodward Ave., Detroit 26
Maczewski, John E.........24735 Van Dyke, Centerline
Mader, Ivan J...26111 Woodward Ave., Huntington Wds.
Magnell, Ralph C.........8825 Puritan Ave., Detroit 38
Maguire, Clarence E...1553 Woodward Ave., Detroit 26
Mahanti, Biresh C...........2300 Oak St., Wyandotte
Mahlin, Murray S.....16820 Greenfield Ave., Detroit 35
Mahoney, Hugh M.....1553 Woodward Ave., Detroit 26
Maibauer, Fredk. P.......2934 Biddle Ave., Wyandotte
Mainwaring, Rosser L...........1910 Russell, Dearborn
Mainzer, Jacob................1381 Linden, Plymouth
Maire, Edward D.......15224 E. Jefferson, Detroit 30
Maisel, Harry
Maitland, Ruth J.....Mich. Bell Telephone, Detroit 26
Majauskas, V. E.............23738 Joy Rd., Detroit 39
Majzoub, Ahmad J.............3334 Fort, Lincoln Park
Malina, Stephen..............1601 Kirkway Dr., R. 3, Bloomfield Hills
Malje, Frank J.........Garden City Clinic, Garden City
Malone, John M.......17300 Schaefer Rd., Detroit 35
Malone, Robert E.........15101 Southfield, Allen Park
Maloney, John A. (L)....670 Maccabees Bldg., Detroit 2
Maloney, Philip J.......16401 Grand River, Detroit 27
Maltzer, Jos. H.........26505 John R, Madison Heights
Mammel, Bernard T...1447 W. Seven Mile Rd., Detroit 35
Mancuso, Vincent S. (L)........611 S. W. 38th Ave., Ft. Lauderdale, Fla.
Mandel, Leslie............26750 Grand River, Detroit
Mandelbaum, B.....1400 Chrysler Expwy., Detroit 48207
Mandell, Gerald H...........Sinai Hospital, Detroit 35

Mandiberg, Jack N.....22341 W. Eight Mile Rd., Detroit
Mann, Andrew D..............20901 Moross, Detroit 36
Manning, Morey H...950 E. State Fair Ave., Detroit 3
Mapletoft, Kenneth E...........420 Mohawk, Dearborn
Marcotty, Andreas....Henry Ford Hosp., Detroit 48202
Marcus, Edwin L..........15101 Southfield, Allen Park
Marecki, Vincent J.........10326 W. Warren, Dearborn
Margolis, Marvin O. (A)..Herman Kiefer Hosp., Detroit
Margules, Saul Z.........11846 E. McNichols, Detroit 5
Marinus, Carleton J. (L)........1553 Woodward Ave., Detroit 26
Mark, Jerome......513 David Whitney Bldg., Detroit 26
Markey, Alexander P.....14853 Michigan Ave., Dearborn
Markey, Frank R...........17174 Fairfield, Detroit 21
Markoe, Rupert C. L.......7600 John R St., Detroit 2
Marks, Ben........232 W. Grand River Ave., Detroit 26
Marks, Bert W.....8250 Lincoln Dr., Huntington Woods
Marsh, Alton R. (L)....15696 Woodland Dr., Dearborn
Marshall, James R. (L)........14827 E. Jefferson Ave., Detroit 15
Marshall, J. R., Jr.........20160 Mack Ave., Detroit 26
Martin, J. B., Jr.........449 E. Elizabeth St., Detroit 1
Martin, Lyndle R.........2000 Second Blvd., Detroit 26
Martin, Peter A.............857 Fisher Bldg., Detroit 2
Martin, Walter...........17523 Dequinder, Detroit 12
Martin, Wilbur C.............10401 W. Chicago, Detroit
Martinez, Alvaro............15830 Fort St., Southgate
Martinez, Pedro O..........1439 Bagley Ave., Detroit 16
Martmer, Edgar E................693 Washington Rd., Grosse Pointe 30
Marwil, Thos. B.......17563 Greenfield Rd., Detroit 35
Marvin, Robert C.......22362 Morley, Dearborn 48124
Mascarin, T. A.........18101 E. Warren, Detroit 48224
Mathis, Perry L............3239 Clements, Detroit 38
Matthews, Burton V....13724 W. Fort St., Southgate
Mattman, Paul E.............1500 Seminole, Detroit 14
Mattson, Theo. M.....1229 Dav. Whitney Bldg., Detroit
Mauch, Eugene W.........15101 Southfield, Allen Park
Mauthe, Harry G...........16859 Pollyana Dr., Livonia
Maynard, Fredk. M.........6828 Park Ave., Allen Park
Mays, William O.........3220 W. Boston Blvd., Detroit
McAlonan, William T. (L)....10 Peterboro St., Detroit 1
McAlpine, Gordon S. (L)......3011 W. Grand Blvd., Detroit 2
McBryan, Thos. J.................Grace Hosp., Detroit
McCadie, James H...............13700 Woodward Ave., Highland Park 3
McCall, Marion G., Jr.....2930 W. Grand Blvd., Detroit
McCandless, Virginia........270 S. Melborn, Dearborn
McCaughey, R. S.......Wayne St., University, Detroit 7
McClellan, Robt. J.....16345 W. McNichols, Detroit 35
McClelland, Rachel L.....33026 Five Mile Rd., Livonia
McClendon, James J.........8401 Woodward, Detroit 2
McClintock, John J. (L)..41449 Wilcox Rd., Plymouth
McClure, Robt. W.......9111 E. Outer Dr., Detroit 13
McClure, Wm. R. (L)....Box 1498, Boynton Beach, Fla.
McCole, C. E...........Henry Ford Hospital, Detroit 2
McColl, Chas. W.........2025 Ford Avenue, Wyandotte
McColl, Clarke M.......2799 W. Grand Blvd., Detroit 2
McCollum, E. Bert................20867 Mack, Detroit
McCord, Carey P. (L)..Sch. of Public Health, Ann Arbor
McCormick, Colin C. (A)........24352 Rockford Ave., Dearborn
McCue, Francis B...........6742 Park Ave., Allen Park
McCullough, L. E...1711 Dav. Whitney Bldg., Detroit 26
McDonald, Angus L. (L)......15125 Gratiot, Detroit 5
McDonald, John R.............Harper Hosp., Detroit 6
McDonald, Wm. G.......15600 Michigan Ave., Dearborn
McEvitt, Wm. G.......1140 W. Boston Blvd., Detroit 2
McGee, T. Manford........22000 Greenfield, Oak Park
McGillicuddy, W. E. (R)......7542 Pinehurst, Dearborn
McGinnis, Kenneth D.
McGlaughlin, N. D.......2312 Biddle Ave., Wyandotte
McGough, Jos. M.........18716 Grand River, Detroit 23
McGuire, John F.........3815 Pelham, Dearborn 48124
McHenry, John T...........1401 Rivard St., Detroit 7
McHenry, Martin......Henry Ford Hospital, Detroit 2
McIntosh, Robt. D.........6307 W. Fort St., Detroit 9
McIntyre, Wm. B...1145 Dav. Whitney Bldg., Detroit 26
McKean, G. Thos.....1553 Woodward Ave., Detroit 26
McKeever, Geo. E.......5237 Oakman Blvd., Dearborn
McKenna, Chas. J...........14618 E. 7 Mile, Detroit 5
McKinney, Roy J.........719 New Center Bldg., Detroit
McKnight, Robt. E.........20905 Greenfield, Southfield
McLane, Harriet I. E. (L)..4350 Oregon Ave., Detroit 4
McLaurin, Jasper E.............5050 Joy Rd., Detroit
McLean, Brita R.................1365 Cass, Detroit 26
McLean, Don W...........1066 Fisher Bldg., Detroit 2
McLean, Donald C...........459 Fisher Bldg., Detroit
McNamara, Joseph M...........9430 S. Main, Plymouth
McNeill, Roger F...........119 Kercheval, Grosse Pte.
McNichol, L. J.....18424 W. McNichols Rd., Detroit 19
McPhee, Roderick T.....21503 Harper, St. Clair Shores
McQuiggan, Mark C.........15121 W. McNichols Rd., Detroit 35
McQuiggan, Mark R.............700 Seward, Detroit 2
Medalie, Morris................1800 Tuxedo, Detroit 6
Meek, Stuart F.........19701 Fleetwood, Harper Woods
Meghnot, Parviz..............1800 Tuxedo, Detroit 6
Melander, L. W., Jr.........1229 David Whitney Bdg., Detroit 26
Mellen, Hyman S.........16800 Greenfield, Detroit 35
Mellinger, Raymond C.......959 Pemberton, Grosse Pte.
Melnik, Maxim P.......3011 W. Grand Blvd., Detroit 2
Melnyczuk, Nestor..........19600 W. Warren, Detroit
Menagh, Frank R. (L)..4010 Columbus Ave., Detroit 4
Mendelson, Herbert......15200 Northfield, Oak Park 37
Mendelssohn, Reuben J...8100 E. Jefferson Ave., Detroit
Mendians, Edgar V.......9486 Beaconsfield, Detroit 24
Mendoza, Saml.................6356 Michigan, Detroit
Menton, Norman J.......15300 W. McNichols, Detroit 35
Mercader, Rodolfo S.........33000 Palmer Rd., Wayne
Merkel, Chas. C.....85 Kercheval Ave., Gro. Pte. Farms
Merkle, Karl..............530 N. Telegraph, Dearborn
Merrill, C. R., Jr...............1951 Monroe, Dearborn
Merritt, Earl G...............10 Peterboro, Detroit 1
Mersky, Charlotte I. (A)..32215 Queensboro, Farmington
Metes, John S.......62 Webber Pl., Grosse Pte. Shores
Metzger, Harry C...25504 Wareham, Huntington Woods
Meyer, Eugene..............15830 Fort St., Southgate
Meyer, John S...........Wayne State Univ., Detroit 7
Meyer, Kenneth R...........Oakwood Hosp., Dearborn
Meyers, Marjorie P.......3790 Woodward, Detroit 48801
Meyers, Maurice P...........18984 Livernois, Detroit 21
Michael, Michael J.........703 Mutual Bldg., Detroit 26
Migdoll, David.......15361 Plymouth Rd., Detroit 27
Mihay, Benjamin..............2021 Monroe, Dearborn
Mikesell, W. B., Jr...............23611 Goddard, Taylor
Mikhail, George......Henry Ford Hosp., Detroit 48202
Milad, Anis A.........25701 Joy Rd., Dearborn Heights
Mileris, Vytautas......2730 E. Jefferson Ave., Detroit 7
Millard, Glenn E.............958 Fisher Bldg., Detroit
Miller, Antonia......810 Dav. Whitney Bldg., Detroit 26
Miller, Danl. H...........23100 Cherry Hill, Dearborn
Miller, Elmer B.........20 Oxford Rd., Pleasant Ridge
Miller, George W...15850 E. Warren Ave., Detroit 48224
Miller, Jacob J.........20131 James Couzens, Detroit 35
Miller, J. Martin......2799 W. Grand Blvd., Detroit 2
Miller, Karl L.........1553 Woodward Ave., Detroit 26
Miller, Myron H. (L)............27330 Southfield Rd., Lathrup Village
Miller, Oscar W.......Fleetwood Plt., F.B.D., G.M.C., Detroit 9
Miller, Thos. H.....1305 Dav. Whitney Bldg., Detroit 26
Miller, Wm. E. (L)............10 Peterboro, Detroit 1
Miller, William J.........5649 Inkster Rd., Garden City
Mills, Clinton C.....16190 Jas. Couzens Hwy., Detroit 21
Mills, Geo. R..............8209 Allen Road, Allen Park
Milton, S. Byron......26560 W. Outer Dr., Lincoln Park
Mines, Robert E., Jr. (M)......8401 Woodward Ave., Detroit 2
Mintz, Edward I...........954 Fisher Bldg., Detroit 2
Mintz, Morris J..............17563 Greenfield, Detroit
Minui, Morteza......1576 Kirkway Dr., Bloomfield Hills
Mishelevich, Sophie (L)..4651 E. Nine Mile Rd., Warren
Miskinis, Martyna......393 W. Grand Blvd., Detroit 16
Missavage, Edward, Jr...Wayne Co. Genl. Hosp., Eloise
Mitchell, A. W...............12000 Visger, Detroit
Mitchell, C. Leslie......Henry Ford Hospital, Detroit 2
Mitchell, Darnell P.....8401 Woodward Ave., Detroit 2
Mitchell, Roy A...............316 Helen Ave., Trenton
Moehlig, Robt. C. (L)..3001 W. Grand Blvd., Detroit 2

Moghissi, Kamran S...763 David Whitney Bl., Detroit 26
Mogill, Geo................3150 Second Blvd., Detroit 1
Moisides, Vasil P. (L)....28 W. Adams Ave., Detroit 26
Moll, Clarence D..............10 Peterboro St., Detroit 1
Molnar, Stephen K...4525 S. Telegraph Road, Dearborn
Molner, Jos. G.........14890 Glastonbury Rd., Detroit
Momcilovich, Boxidar..2241 Huron River Dr., Rockwood
Mond, Edward.............10 Witherell St., Detroit 26
Monson, Robt. C..............17520 Chester, Detroit 24
Montante, Jos. R.....3126 Middlebelt Rd., Orchard Lake
Montenegro, Milton............18512 Hillcrest, Livonia
Montgomery, Wm. C.................26711 Woodward, Huntington Wds.
Monto, Raymond W.....Henry Ford Hospital, Detroit 2
Moore, John W., Jr.......8251 W. 8 Mile Rd., Detroit
Moore, Warren R.......17800 E. 8 Mile Rd., Detroit 36
Mopper, Coleman....14633 E. Seven Mile Rd., Detroit 5
Morales, Miriam V.....Detroit General Hosp., Detroit 26
Moran, Frank J...........27459 Five Mile Rd., Livonia
Morand, Louis J. (A)........18944 Fairfield, Detroit 21
Moreno, Jose..........8830 W. McNichols, Detroit 21
Morgan, Donald N...1553 Woodward Ave., Detroit 26
Morgan, Philip J.......1575 Cherboneau, A. 53, Detroit
Moriarty, Geo. J.......3011 W. Grand Blvd., Detroit 2
Morita, Yoshikazu..............26111 Woodward Ave., Huntington Wds.
Morley, Arthur R.........15753 Promenade, Allen Park
Morley, George M.........12922 W. Warren, Dearborn
Morley, Harold V...........970 Fisher Bldg., Detroit 2
Morley, James A. (L)..10514 Plymouth Ave., Detroit 4
Moroun, Sheffick J.............675 Parker, Detroit 14
Morris, Harold L. (L)....26111 Meadowbrook Rd., Novi
Morrison, George W..............2033 Park, Detroit 26
Morse, William H.........19203 Grand River, Detroit 23
Morton, David G...........19445 Plymouth, Detroit 28
Moseley, Fredk. L.............2561 S. Schaefer, Detroit
Mosen, Max M. (A)..26116 York Rd., Huntington Wds.
Moser, Peter F.......26151 Huron River Dr., Flat Rock
Moses, John W.............754 Fisher Bldg., Detroit 2
Moss, Ervin B. (A)..........23295 Kipling, Oak Park
Moss, Nathan H.............2847 Trumbull, Detroit 16
Moss, Norman D...........28233 Tapert Dr., Southfield
Moss, Selma S.............20905 Greenfield, Southfield
Mott, Carlin P. (L)..2395 W. Grand Blvd., Detroit 8
Moynihan, John W.......2841 Monroe Blvd., Dearborn
Mozen, Herschel E.....300 W. McNichols, Detroit 48203
Mucasey, John........21415 W. 8 Mile Rd., Detroit 19
Mullen, Jos. R.............19003 Ecorse Rd., Allen Park
Munson, Henry T.........18350 Mack, Grosse Pte. 36
Murphy, Donald J. (A)........607 Highland Park Dr., Billings, Montana
Murphy, Scipio G...8401 Woodward Ave., Detroit 48202
Murray, Gordon M.........9901 Whittier, Detroit 24
Murray, Ian H. L...........474 Fisher Bldg., Detroit 2
Murray, Robt. J................3700 West Rd., Trenton
Murray, Thomas H.........25239 Southfield, Southfield
Muske. Paul H...........13244 W. Warren, Dearborn
Myers, Danl. W...........1150 Bedford Rd., Detroit 30
Nahigian, Russell......17371 Annchester Ave., Detroit 19
Nahoum, Antoine..........1030 Kensington, Detroit 30
Nash, Edward B.............4075 Inkster Rd., Inkster
Naud, Henry J. (L)..18456 Grand River Ave., Detroit 23
Naud, Joseph H.....412 Dav. Whitney Bldg., Detroit 26
Navori, Cornelius A.......3516 Fort Street, Lincoln Park
Naylor, Arthur H. (L)..2100 N. Tipsico Lk. Rd., Milford
Neeb, Walter G.......16840 E. Warren St., Detroit 24
Nehra, John M.....320 E. Center Prof. Bldg., Detroit 36
Neill, Edwin J...................5026 Bedford, Detroit
Nelson, Darwin M.............63 Ridge Rd., Detroit 36
Nelson, Harry M. (L)..3001 W. Grand Blvd., Detroit 2
Nelson, Norman A.......Wayne Co. Gen. Hosp., Eloise
Nelson, Victor E...........3025 Crooks Rd., Royal Oak
Nesbit, Warren S...............24382 Ross Ct., Detroit
Netreba, Jules L...........25210 Grand River, Detroit
Neufeld, Paul N...17000 W. Eight Mile Rd., Southfield
Newman, Ernest (R)..17371 Evergreen St., Detroit 19
Newman, Geo. F.........2021 Monroe Blvd., Dearborn
Newman, Max K.......16861 Wyoming Ave., Detroit 21
Newton, Kenneth............11841 Susan Ave., Warren
Newton, Nicholas........29901 Ford Rd., Garden City
Nichols, Wallace, Jr.....3631 S. Longmeadow, Trenton

Nickel, Warren O.............861 Monroe, Dearborn 8
Nickels, Albert W.....3011 W. Grand Blvd., Detroit 2
Nielsen, Aage E.......320 Professional Bldg., Detroit 1
Nielsen, Donald R.............26339 Woodward Ave., Huntington Wds.
Nigro, Norman D......7815 E. Jefferson, Detroit 14
Nill, John B. (L)........15001 E. Warren, Detroit 24
Nill, Wm. F. (L)........15001 E. Warren, Detroit 24
Noble, Wm. C...........4045 W. Jefferson, Ecorse 29
Nolan, Bernard E.........5460 Schaefer Rd., Dearborn
Nolting, Wilfred S. H...15850 E. Warren Ave., Detroit 24
Northcross, David C.....2828 W. Boston Blvd., Detroit 6
Norton, Arthur B. (L)......1077 Fisher Bldg., Detroit 2
Noshay, Wm. C.......2799 W. Grand Blvd., Detroit 2
Novack, Richard L. (A)......15930 Shadyside, Livonia
Novy, Robt. L. (L)........858 Fisher Bldg., Detroit 2
Nowosielski, P. F.........14390 Blackburn Rd., Livonia
Nwokedi, C...............12000 Visger Rd., Detroit 17
Nyboer, Jan.................Harper Hospital, Detroit 1
Nyboer, Victor J.........261 Mack Blvd., Detroit 48201
O'Brien, Geo. M.....18239 W. Seven Mile Rd., Detroit
O'Connor, Katheryn L.....17711 Schoolcraft, Detroit 27
O'Donnell, Dayton H.........222000 Greenfield, Detroit
Oetting, Edward M.......1041 Whittier, Grosse Pointe
O'Gawa, Gilbert M.........Henry Ford Hospital, Detroit
Ohmart, Galen B. (L)..8721 E. Jefferson Ave., Detroit 14
Ohorodnik, Julius M.......Bon Secours Hospital, Detroit
Okun, Milton H.......3261 Sherbourne Rd., Detroit 21
Oldford, Joseph R.....17000 W. 8 Mile Rd., Southfield
Olejniczak, Stanley....Wayne County Gen. Hosp., Eloise
Olen, Alex...............13100 Harper Ave., Detroit 13
O'Linn, Francis P.........1055 Fisher Bldg., Detroit 2
Olmsted, Geo. S...27305 Southfield Rd., Lathrup Village
Olson, Avis M.....Mt. Carmel Mercy Hosp., Detroit 35
Olson, Donald T...17701 W. McNichols Rd., Detroit 35
Olson, George P..................Chrysler Corp., Detroit
Olson, James A.......17000 West 8 Mile Rd., Southfield
Oppenheim, Jos. M...........24091 Dante, Oak Park 37
Ormond, Robt. S...........1951 Monroe St., Dearborn
O'Rourke, Paul V...........2635 Woodstock, Detroit 3
O'Rourke, Randall M...........7384 12th St., Detroit 6
Ortiz, Armando....610 Northland Med. Bldg., Southfield
Osius, Eugene A.......901 Dav. Whitney Bldg., Detroit
Ostrowski, Arthur Z.........610 Northland Med. Bldg., Southfield
Otlewski, Eugene A.......20905 Greenfield, Southfield
Ottaway, John P...18226 Mack Ave., Grosse Pte. Farms
Otto, Donald........Det. Memorial Hospital, Detroit 26
Owen, Clarence I. (L)..2689 Dupont, Jacksonville, Fla.
Palmer, Alice E.........810 Dav. Whitney Bldg., Detroit
Palmer, Milton R.........8700 Dexter Blvd., Detroit 6
Palmisano, I. J.........25447 Plymouth Rd., Detroit 39
Panczak, Tamara......Plymouth State Hosp., Northville
Panic, Stephen M.......1001 W. Seven Mile, Detroit 3
Pantos, Theo. G.....1536 Dav. Whitney Bldg., Detroit 26
Parejo, Jose M..............4342 W. Vernor, Detroit 9
Parfanowycz, S. N. (A)......3347 Grant St., Detroit 12
Parker, Benj. R...........19149 W. Seven Mile, Detroit
Parnagian, Leo..........868 Fisher Bldg., Detroit 48202
Parnell, John W...21 Whitcomb Dr., Grosse Pte. Farms
Parr, Robt. W. (A)..1126 Audubon Rd., Grosse Pte. 30
Parrish, Rufus (A)............2610 Starlevant, Detroit
Pasternacki, N. T...........6203 Chene St., Detroit 11
Pastorius, Melvin K.......5947 Middlesex, Dearborn 1
Patton, Roy B...........Henry Ford Hospital, Detroit 2
Paul, Lloyd J..................19321 Greenfield, Detroit
Pawlowski, Jerome I. (L)........2009 E. Grand Blvd., Detroit 11
Payne, Eugene H. (R)......Box 852, Mariana, Florida
Payne, Walter A., Jr.......357 Hillcrest, Grosse Pte. 36
Paysner, Harry A..13700 Woodward Ave.,Highland Pk. 3
Pearce, Arthur J.........15317 Piedmont St., Detroit 23
Pearlman, Jack......25860 Concord, Huntington Woods
Pearse, Harry A.......17000 W. Eight Mile, Southfield
Pedersen, Herbert E.........3815 Pelham Rd., Dearborn
Peggs, Geo. F...........5419 Livernois Ave., Detroit 10
Pena, Carlos E. F. (A)........Grace Hospital, Detroit
Pendy, Geo. V.....1001 Dav. Whitney Bldg., Detroit 26
Pendy, John M...1001 David Whitney Bldg., Detroit 26
Penner, David A.........18530 Grand River, Detroit 23
Pensler, Leslie..............10151 Michigan, Dearborn

Pensler, Meyer........10151 Michigan Ave., Dearborn 2
Percy, Donald F.......15901 Greenfield Ave., Detroit 27
Perdue, Graee M.......3011 W. Grand Blvd., Detroit 2
Perez-Gurri, Jose L...........3150 Carpenter, Detroit 12
Perkin, Frank S.......3011 W. Grand Blvd., Detroit 12
Perlis, Hyman L. (L)..........10 Peterboro, Detroit 1
Perlis, Marvin S...........1030 Fisher Bldg., Detroit 2
Perry, Joseph H.......259 Lewiston Rd., Grosse Pte. 36
Petermann, Claus..1900 Dav. Broderick Twr., Detroit 26
Peters, Wm. R.....12400 E. Seven Mile Rd., Detroit 5
Peterson, Gustav....Fisher Body, Willow Run, Ypsilanti
Peterson, Robert A...........18700 Meyers Rd., Detroit
Petix, Saml. C..............19207 Sehaefer, Detroit 35
Petoskey, Edward A...........5656 W. Fort, Detroit 9
Petriek, Thos. J...........15101 Southfield, Allen Park
Petrini, Mario A...........1080 Fisher Bldg., Detroit 2
Petrucco, Louis A.............15400 Plymouth, Detroit
Petty, Thos. A.....17300 E. Jefferson Ave., Grosse Pointe
Petz, Arthur John..........15420 Farmington, Livonia
Petz, Thomas J.....1139 Dav. Whitney Bldg., Detroit 26
Peven, Philip S...........18709 Meyers Rd., Detroit 35
Phillips, Burton E.............5050 Joy Rd., Detroit 4
Pieard, Jos. D...........5237 Oakman Blvd., Dearborn
Pieeone, Louisa I.........17700 W. Warren, Detroit 28
Pichette, J. Walton......6550 Greenfield Rd., Dearborn
Pickard, Orlando W. (L)........14300 W. McNichols, Detroit 35
Pickering, L. M.............15830 Fort St., Southgate
Pierce, James M., Jr.....Wayne St. University, Detroit 7
Pietraszewski, A. W.....10338 Joseph Campau, Detroit 12
Piligian, John T.............3825 Brush St., Detroit 1
Pingel, James F...............998 Norfolk, Birmingham
Pinney, Lyman J. (L)......28 W. Adams St., Detroit 26
Pino, Ralph H. (L)..48151 W. Ann Arbor Rd., Plymouth
Piper, Ralph R..............1495 McKinstry, Detroit 9
Pittman, John E. (L)..1553 Woodward Ave., Detroit 26
Pitts, Kenneth E...........600 Middlesex, Grosse Pointe
Platz, Carol K.....612 Est. Cen. Prof. Bldg., Detroit 36
Pliskow, Harold..10730 W. Seven Mile Rd., Detroit 21
Plotnick, Harold............18654 Muirland, Detroit 21
Plous, Eugene I.............569 Fisher Bldg., Detroit 2
Podolsky, Harold M...........3755 Fort, Lincoln Park
Pogrebniak, A,..........25210 Grand River, Detroit 40
Poim, Senta V..................10 Peterboro, Detroit 1
Polentz, Chas. P...Medical Concourse N.C., Southfield
Polk, John E.................8742 12th St., Detroit 6
Pollack, Jerome L.........14551 Southfield, Allen Park
Pollack, John J...............18200 Wyoming, Detroit
Pollard, R. J...................Grace Hosp., Detroit 1
Pollens, Louis S.....127 W. McNichols Rd., Detroit 35
Pollina, Clement J.......21503 Harper, St. Clair Shores
Ponka, Jos. L.........2799 W. Grand Blvd., Detroit 2
Pool, Walter D...........20901 Moross Rd., Detroit 36
Poos, Edgar E. (L)....3001 W. Grand Blvd., Detroit 2
Pope, Gerald...........Henry Ford Hospital, Detroit 2
Porretta, Chas. A...507 Northland Med. Bldg., Southfield
Porretta, Francis S...............18591 Saratoga Blvd., Lathrup Village
Porretta, George F.........20905 Greenfield, Southfield
Porter, Fredk. G.............29590 Five Mile, Livonia
Porter, Howard J. (A)..General Delivery, Romulus 48174
Portnoy, Harry............18010 Roselawn, Detroit 21
Posch, Jos. L...............1410 Kales Bldg., Detroit 26
Posner, Irving..........18111 Muirland Ave., Detroit 21
Postigo, Julio C.
Potts, Elihue B...................7404 Dexter, Detroit
Poznanski, Andrew K...Henry Ford Hospital, Detroit 2
Pracher, John R.............3815 Pelham Rd., Dearborn
Prasad, Ananda S.....Wayne State University, Detroit 7
Pratt, Jean P. (L)......18910 Fairway Dr., Detroit 21
Pratt, Lawrence A. (A)............U.S.O.M., A.P.O., San Francisco, Ca.
Preston, Ruth E.......3011 W. Grand Blvd., Detroit 2
Priee, A. Hazen (L)..408 Dav. Whitney Bldg., Detroit 26
Price, Alvin E.........1553 Woodward Ave., Detroit 26
Price, Scott K.......Oakwood Hospital, Dearborn 48124
Priest, Robt. J...........Henry Ford Hospital, Detroit 2
Prince, Addison E...............8942 Dexter, Detroit 6
Prisbe, Edward J.......16603 Plymouth Rd., Detroit 27
Priver, Julien..........6741 W. Outer Dr., Detroit 35
Procailo, Alexander B.....29901 Ford Rd., Garden City
Proctor, J. Laurence............3815 Pelham, Dearborn
Proetor, Leonard R.........3815 Pelham Rd., Dearborn
Proctor, Lorne D.......Henry Ford Hospital, Detroit 2
Prokop, Frank P.........12740 S. Marrow St., Dearborn
Prokopowycz, V. (A)..........19666 Conant, Detroit 34
Proskey, Aloysius J. (A)..16167 Glastonbury, Detroit 19
Proud, Russel F.......26151 Huron River Dr., Flat Rock
Prus, A. Michael..........4160 John R Street, Detroit
Prust, Frank W...1536 David Whitney Bld., Detroit 26
Prystowsky, S.................1800 Tuxedo, Detroit 6
Przybylski, Thom. J.........20905 Greenfield, Southfield
Pugh, Howard C.......1553 Woodward Ave., Detroit 26
Pugliesi, Angelo..........9489 E. Outer Dr., Detroit 13
Pugliesi, Benedetto........9489 E. Outer Dr., Detroit 13
Purcell, Frank H. (L)......10 Witherell St., Detroit 26
Puro, Henry E.............1733 Trenton Dr., Trenton
Pursel, Stewart E.......1016 Prof. Plaza, Detroit 48201
Purves, W. L...............17595 Parkside, Detroit 21
Quennell, W. L. (A)......Highland Park Gen. Hosp., Highland Park
Quigley, Eugene H...........111 Brentwood, Dearborn
Quigley, Wm. G...........1075 Fisher Bldg., Detroit 2
Quinn, Edward L...........1141 Golfview, Birmingham
Quinones, Rafael E.......17200 E. Warren, Detroit 24
Rabinovitch, Bella M.......20133 Marlowe, Detroit 35
Raby, Naim M.................15830 Fort, Southgate
Rachmaninoff, N.............Harper Hospital, Detroit 1
Radgens, Paul D.........Ford Mtr. Co., Highland Park
Rahm, Lambert P...14411 E. Jefferson Ave., Detroit 15
Raiford, Frank P., Jr...........9107 12th St., Detroit 6
Ralyea, Imbi..............16645 Freeland, Detroit 35
Ramos, Benjamin R...12950 W. Chicago Blvd., Detroit 28
Ramos, Herminio R.........9801 Conant, Hamtramck 12
Ramsey, Robt. H...........3815 Pelham Rd., Dearborn
Randall, David S...........3955 Fort St., Lincoln Park
Rapoport, Bernard..............1800 Tuxedo, Detroit 6
Rapp, Seymour L.........5055 W. Outer Dr., Detroit 35
Raskin, Herbert A.........18510 Meyers Rd., Detroit 35
Rastello, Peter B. (R)..........3295 West Shore Dr., Orchard Lake
Rattner, Wm. H.....1355 Dav. Whitney Bldg., Detroit
Rau, Fredk. W.......215 Professional Bldg., Detroit 1
Raven, Clara..............400 E. Lafayette, Detroit 26
Ravin, Herbert A.....6767 W. Outer Dr., Detroit 48235
Ravitz, Louis A...........23350 Thorncliff, Southfield
Ray, Kenneth J.............28059 Elba Dr., Grosse Isle
Raynor, Harold F. (L)......49 Virginia Pk., Detroit 2
Razi, Massoud................1214 S. Wayne, Wayne
Rebuck, John W.......2799 W. Grand Blvd., Detroit 2
Redding, Lowell G...1336 Southfield Rd., Lincoln Park
Reder, Benjamin....17301 W. Eight Mile Rd., Detroit 35
Redfern, W. Earl........2799 W. Grand Blvd., Detroit
Reed, Ivor E. (L)..25579 Loch Lomond Dr., Dearborn
Reed, Joseph O., Jr.............448 Lincoln, Detroit 30
Reed, Melvin L.............4160 John R St., Detroit 1
Rees, Howard C...........15700 Mack Ave., Detroit 24
Reichert, Carl E.....18412 Mack Avenue, Grosse Pointe
Reid, John G.........1553 Woodward Ave., Detroit 26
Reid, Wesley G.......3001 W. Grand Blvd., Detroit 2
Reidt, William U...............1800 Tuxedo, Detroit 6
Reiff, Morris V...............10241 Joy Rd., Detroit 4
Reinhard, Richard E...7815 E. Jefferson Ave., Detroit 14
Reinsh, Ernest R.......600 Trailwood Path, Birmingham
Reisig, Robert O...............20867 Mack, Detroit 36
Reisman, Nathan J.........15344 W. McNichols Road., Detroit 35
Reisman, Saml. G.....1553 Woodward Ave., Detroit 26
Reive, David L. E. (A)....25447 Plymouth, Detroit 39
Remski, James E...........29447 Ravine Dr., Livonia
Reno, George L.............970 Fisher Bldg., Detroit 2
Rentenbach, Robt. F...314 David Whitney Bldg., Detroit
Resto, Manuel..............21955 Wildwood, Dearborn
Resto Soto, A. D.........17644 W. Warren, Detroit 28
Reveno, Wm. S.........3001 W. Grand Blvd., Detroit 2
Reyner, Clarence E. (L)....10 Peterboro St., Detroit 1
Reynolds, Robt. M...........856 Fisher Bldg., Detroit 2
Rezanka, Harold J.....1553 Woodward Ave., Detroit 26
Rhoades, Francis P...2414 16 Broderick Twr., Detroit 26
Rice, Harold B.............10 Peterboro St., Detroit 1
Rice, Meshel.....................533 Coats Rd., Oxford
Richardson, Allen L. (R).................Naubinway

Rick, Paul J. . . . . 12673 Joan, Detroit 5
Riddell, Wilfred A. . . . . . . 15420 Farmington Rd., Livonia
Rieckhoff, Geo. G. (L) . . . . . . 14905 E. Jefferson Ave., Detroit 15
Rieden, James A. . . . . 18053 Muirland, Detroit 21
Rieger, John B. (L) . . . . 746 Pallister, Detroit 2
Rieger, Mary H. (L) . . . . 19285 Lucerne Dr., Highland Park
Riethmiller, Robt. F. . . 12444 E. Seven Mile Rd., Detroit
Rinaldo, Joseph, Jr. . . . . 6071 Outer Dr., Detroit
Rinkel, Robert W. . . . . 7319 Park Ave., Allen Park
Ritter, George . . . . 28245 Southfield, Lathrup Village
Rivera, Emiliano, Jr. . . . . 1800 Tuxedo, Detroit 6
Rizzo, Paul . . . . . . 260 Eastland Prof. Bldg., Grosse Pte.
Robb, Edward L. (L) . . 17380 Livernois Ave., Detroit 21
Robb, Herbert J. . . . . 2706 Comfort, Birmingham
Roberts, Arthur J. (R) . . . . 859 Winchester, Lincoln Park
Roberts, George A. . . . . . . 7220 Gratiot Ave., Detroit 13
Robertson, Fredk. E. . . . . 17000 W. Eight Mile Rd., Southfield
Robinson, Harold A. . . . . . . 10040 Yellowstone, Detroit 4
Robinson, Howard . . . . 953 Fisher Bldg., Detroit 2
Robinson, James H., Jr. . . 1553 W. Grand Blvd., Detroit 8
Robinson, Remus G. . . . . 3751 31st St., Detroit 10
Rodin, Ernst A. . . . . 951 E. Lafayette, Detroit 7
Roehl, Karl H. . . . . 1800 Grindley Park, Dearborn
Rogers, Aaron Z. . . . . 20451 Mack Ave., Detroit 36
Rogers, Geo. E. B. . . . . . . 8425 Twelve Mile Rd., Warren
Rogers, John T. . . . . 29586 Five Mile Rd., Livonia
Rogers, Robert P. . . . . 14200 Puritan, Detroit 27
Rogoff, Abraham S. . . . . 17000 W. Eight Mile Rd., Southfield
Rohde, Paul C. (L) . . . . 12282 E. Outer Dr., Detroit 24
Roman, Stanley J. . . . . . . 15020 Michigan Ave., Dearborn
Romanski, Raymond . . 16001 W. Nine Mile Rd., Southfield
Ronayne, John J., Jr. . . . . . . 1609 Biddle Ave., Wyandotte
Rood, Robert C. . . . . 6325 Ellsworth, Detroit
Root, Fayette C. . . . . . . 719 New Center Bldg., Detroit 2
Rosbolt, James F. . . . . 8505 Plymouth Rd., Detroit 4
Rosbolt, O. Paul, Jr. . . . . . . 8505 Plymouth Rd., Detroit 4
Rosefield, John L. . . . . 65 W. Hancock, Detroit 1
Rosello, Luis . . . . 1400 Chrysler Expwy., Detroit 7
Rosen, Harold M. . . . . 8620 W. McNichols Rd., Detroit 21
Rosen, Theodore S. . . . . . . 19340 Monte Vista, Detroit 21
Rosenbaum, Herbert . . . . 18110 Muirland, Detroit 21
Rosenbloom, Alvin B. . . . . 17555 Parkside, Detroit 21
Rosenthal, Albert . . . . 27855 Plymouth Rd., Livonia
Rosenthal, Louis H. . . . . 15401 W. McNichols, Detroit 35
Rosenthal, Saml. . . . . 8844 Joy Rd., Detroit
Rosenwach, Felix F. . . . . 19149 W. Seven Mile Rd., Detroit 19
Rosenzweig, Norman . . . . 6767 W. Outer Dr., Detroit 35
Rosenzweig, Saul . . . . 2542 W. Boston, Detroit 6
Ross, Arthur J. . . . . 18215 Greenfield, Detroit
Ross, Charles V. . . . . 7740 Da Costa, Detroit 39
Ross, Mervyn B. . . . . 9559 Greenfield, Detroit 27
Ross, Oscar A. . . . . 1800 Tuxedo, Detroit 6
Rotarius, Edward M. . . . . Parke Davis Co., Detroit 32
Roth, Edward T. (L) . . . . 640 E. Grand Blvd., Detroit 7
Rother, Ina A. C. . . . . 101 Chicago Blvd., Detroit 2
Rothwell, Walter S. . . . . 2730 Chelsea, Trenton
Rottenberg, Coleman M. J. . . . . 13419 Fenkell, Detroit 27
Rottenberg, E. N. . . 20725 W. Seven Mile Rd., Detroit 19
Rottenberg, Leon . . . . 13419 Fenkell Ave., Detroit 27
Roubeck, William . . 17000 W. Eight Mile Rd., Southfield
Rowda, Michael S. . . . . 7 Cambridge, Pleasant Ridge
Rowe, Jos. J., Jr. . . . . 401 N. Brady, Dearborn
Roy, L. James . . . . 1210 Kales Bldg., Detroit 26
Royer, Richard R. . . . . 18101 E. Warren Ave., Detroit 24
Rubinoff, William . . 21415 W. Eight Mile Rd., Detroit 19
Rubio, Epimaco . . . . 26612 Karen, Warren 48091
Ruble, Paul E. . . . . . . 1139 David Whitney Blg., Detroit 26
Rudner, Earl J. (A) . . . . 7421 W. Seven Mile Rd., Detroit 48221
Ruedemann, Albert D. . . . . 1633 David Whitney, Detroit 48226
Ruedemann, Albert D., Jr.
Rueger, Milton J. . . 717 Dav. Whitney Bldg., Detroit 26
Rueger, Ralph C. . . 9149 E. Jefferson Ave., Detroit 14
Ruel, Richard E. . . 541 Dav. Whitney Bldg., Detroit 26
Ruiz, Luis C. . . . . 1678 Merriman Rd., Wayne
Rule, Jack A. (A) . . . . Detroit General Hosp., Detroit
Runge, Edward F. (A) . . . . 8295 39th Avenue N., St. Petersburg, Fla.
Rupe, Clarence E. . . . . 2799 W. Grand Blvd., Detroit 2
Rupprecht, Emil F. . . . . . . 15901 Greenfield Rd., Detroit
Rush, Desmond K. . . 1429 Dav. Whitney Bldg., Detroit 26
Ruskin, Robert L. . . . . Sinai Hospital, Detroit 35
Ruskin, Saml. H. (L) . . . . 1112 Kales Bldg., Detroit 26
Russanow, Georg . . . . 400 E. Lafayette, Detroit 26
Russell, Henry N., Jr. . . . . . . 15101 Southfield, Allen Park
Rutzen, Arthur C. . . . . 1296 Lenox, Bloomfield Hls.
Ruzumna, Richard A. (A) . . 18309 Littlefield, Detroit 35
Ryan, James M. . . . . 16888 Greenfield, Detroit 35
Ryan, William D. (R) . . Box 10931, St. Petersburg, Fla.
Sabbagh, Enrique . . . . . . 2605 W. Grand Blvd., Detroit 8
Sack, Anthony G. . . . . . . 18230 Grand River, Detroit 23
Sadler, Henry H., Jr. . . 12 Tamalpais Rd., Belvedere, Calif.
Sadzikowski, Jos. T. . . 29901 Ford Rd., Garden City 48135
Sage, Bernard A. . . . . 1013 Haigh St., Dearborn
Sager, Edward L. (L) . . . . 13902 Gratiot Ave., Detroit 5
St. Amour, Hector J. (L) . . . . . . 25515 Blossingham Dr., Dearborn Hts.
St. Louis, Rene J. . . . . 10909 W. Jefferson Ave., River Rouge 18
Sakorraphos, S. N. (L) . . . . 66 Crestview Rd., Belmont, Mass.
Sakwa, Saul . . . . . . 17000 W. Eight Mile Rd., Southfield
Salamon, Fredk. A. . . St. Johns Hospital, Detroit 48236
Salan, Lacy J. . . . . 995 S. Main St., Plymouth
Salchow, Paul T. . . . . Herman Kiefer Hosp., Detroit 2
Salem, Edward S. . . 22420 Twyckingham Way, Southfield
Salhaney, Mitchell . . . . 15252 Levan Rd., Livonia
Sall, Caroline D. . . . . 6246 Chase, Dearborn
Sallee, William T. . . . . 17000 W. 8 Mile, Southfield
Saltzstein, Harry C. (L) . . 850 Whitmore Rd., Detroit 3
Salva, Donald L. . . . . 3675 E. Outer Drive, Detroit
Salvaggio, A. T. . . 426 Eastland Prof. Bld., Harper Woods
Samberg, L. Carl . . . . 1210 Kales Bldg., Detroit 26
Sand, Harry H. . . . . 24110 Oxford, Dearborn
Sandberg, Hershel . . . . 19207 Schaefer, Detroit 35
Sander, Irvin W. (R) . . . . 801 W. Long Lake Rd., Bloomfield Hills
Sanders, Alexander W. (A) . . 16350 Hamilton, Detroit 3
Sanderson, Alvord R. (L) . . . . 978 Pemberton Rd., Grosse Pointe 30
Sandler, Nathaniel . . . . . . 76 W. Adams Ave., Detroit 26
Sapala, M. Andrew . . . . 21471 Cherry Hill Rd., Dearborn
Saraf, Leo B. . . . . 14540 E. Warren, Detroit 15
Sargent, Douglas A. . . 816 Grand Marais, Grosse Pte. Park
Sargent, Richard C. . . . . 17357 Fenkell St., Detroit 27
Sargent, William R. . . . . 17357 Fenkell St., Detroit 27
Sarmiento, Manuel . . . . Providence Hosp., Southfield
Sarracino, John B. (A) . . . . 34th Med. Gen. Hosp., A.P.O. 58, N.Y., N.Y.
Sauk, John J. . . . . 302 W. McNichols Rd., Detroit 3
Saunders, Gene A. . . . . 33521 Six Mile Rd., Livonia
Sauter, Simon H. (L) . . . . 1082 E. Grand Blvd., Detroit 7
Sawdyk, Daria H. . . . . 7012 Mich. Ave., Detroit 10
Sazyc, Joseph S. . . . . 22101 Moross Rd., Detroit
Scarney, Herman D. . . . . 3011 W. Grand Blvd., Detroit 2
Schaefer, H. C. . . . . 7815 E. Jefferson, Detroit 14
Schaefer, Robt. L. (A) . . . . 76 W. Adams Ave., Detroit 26
Schaefer, Robt. L., Jr. . . . . 74 W. Adams, Detroit 26
Schaeffer, J. N. . . . . 261 Brady, Detroit 1
Schaeffer, Martin . . . . . . 18275 Warrington Dr., Detroit 21
Schakne, Norman . . . . 669 Fisher Bldg., Detroit 2
Schane, David A. . . . . 19159 Berkeley, Detroit 21
Schatten, Ivan C. . . . . 2201 E. Jefferson Ave., Detroit 7
Schembeck, Isaac S. (L) . . . . 1553 Woodward Ave., Detroit 26
Scherer, Robert A. . . . . 470 Fisher Bldg., Detroit 2
Schidlowsky, Oleg P. . . . . 10531 Farmington Rd., Livonia
Schiller, Arthur E. (L) . . 1553 Woodward Ave., Detroit 26
Schirack, Raymond D. (R) . . . . . . 24201 Aven Da Sevilla, Laguna Hills, Ca.
Schkloven, Norman . . . . 20051 Warrington, Detroit 21
Schlafer, Nathan H. . . . . 10 Witherell St., Detroit 26
Schlesinger, Henry . . . . 13534 Woodward Ave., Detroit 3
Schmaltz, John D. . . 1701 Dav. Whitney Bldg., Detroit 26
Schmidt, George J. . . . . 7106 Park Ave., Allen Park
Schmidt, Harry E. . . . . 667 Fisher Bldg., Detroit 2

Schmidt, Johann..........7815 E. Jefferson, Detroit 14
Schmidt, Klaus P.........871 Fisher Building, Detroit 2
Schmidt, Werner F.........1807 Stroh Bldg., Detroit 26
Schmier, Burton L. (A)..42659 Five Mile Rd., Plymouth
Schmitt, Norman L...10127 W. McNichols Rd., Detroit 14
Schneck, Robt. J.....1553 Woodward Ave., Detroit 26
Schneider, Chas. L.....22148 Michigan Ave., Dearborn
Schneider, Curt P...........655 Fisher Bldg., Detroit 2
Schoenfield, Gilbert D.........8830 W. McNichols Rd., Detroit 21
Scholdager, Rolf H.............1800 Tuxedo, Detroit 6
Schooten, Sarah S. (L)........13700 Woodward Ave., Highland Park 3
Schorer, Calvin E...........951 E. Lafayette, Detroit 7
Schreier, Leonard......4008 South Yosemite, Denver, Co.
Schroeder, Carlisle F.....26505 E. River Rd., Grosse Ile
Schroeder, Gisela....22408 Park Lane, St. Clair Shores
Schroeder, Heinz R.....1941 Hawthorne Blvd., Dearborn
Schroeder, Karl F.......7815 E. Jefferson Ave., Detroit
Schuchter, S. L.................1800 Tuxedo, Detroit 6
Schulte, Carl H. (L)....28 W. Adams Ave., Detroit 26
Schultz, Clarence H.........23100 Cherry Hill, Dearborn
Schultz, Donald V...........23100 Cherryhill, Dearborn
Schultz, Ernest C. (L)..1553 Woodward Ave., Detroit 26
Schuman, Bernard M...Henry Ford Hospital, Detroit 2
Schwartz, Benj...........275 W. Grand Blvd., Detroit 16
Schwartz, Harold A.......7605 Puritan Ave., Detroit 38
Schwartz, Louis A. (A)..P.O. Box 315, Rockport, Mass.
Schwartz, Oscar D.....7421 W. Seven Mile Rd., Detroit 21
Schwartzberg, J. A.........19445 Plymouth, Detroit 28
Schwarz, Frank W.........23100 Cherryhill, Dearborn
Schweigert, C. F.........10627 Cadieux Rd., Detroit 24
Schwimmer, Benjamin......8811 John C. Lodge Bldg., Detroit 2
Schwocho, Niles H.........7106 Park Ave., Allen Park
Sciarrino, Stanley V. (L)........15388 Livernois Ave., Detroit 38
Scott, Marrion U...........20170 Mack Ave., Detroit 36
Scott, Wm. J. (L)..20170 Mack Ave., Grosse Pte. Woods
Screen, Raymond J...........18520 W. Seven Mile Rd., Detroit 19
Secord, Eugene W. (A)..660 Whitmore Rd., Detroit 3
Segal, Andrew E.......19481 Livernois Ave., Detroit 21
Segar, Laurence F.........998 Church St., Ventura, Ca.
Segel, Nathan P.............19100 Manor, Detroit 21
Seibert, Alvin H. (L)..............1180 Bedford Rd., Grosse Pt. Pk. 30
Seiferlein, A. L.........1067 Devonshire, Detroit 48230
Seim, Elmer J...............Grace Hospital, Detroit 1
Seitam, Karl............10149 Michigan Ave., Dearborn
Selbst, Ronald A.....26339 Woodward, Huntington Wds.
Self, Wm. G.......20861 Mack Ave., Grosse Pointe 36
Selim, Mahmoud M...2141 E. Jefferson Ave., Detroit 7
Sellers, Chas. W. (L)..18545 Schoolcraft Ave., Detroit 23
Sellers, Graham A. (A)......10535 W. Seven Mile Rd., Detroit 21
Seltzer, Joseph...........20905 Greenfield, Southfield
Selzer, Isidore..............4811 John R St., Detroit 1
Senecoff, Stephen D.......16800 Greenfield, Detroit 35
Sepetys, Povilas............25466 Clairview, Dearborn 6
Seski, Arthur G...........1069 Fisher Bldg., Detroit 2
Severyn, Fred R.............15830 Fort St., Southgate
Sewell, Geo. (L)......31801 Arlington Dr., Birmingham
Sewell, Guy W.....17751 East Warren Ave., Detroit 24
Shaalan, A. Karim..........Doctors Hospital, Detroit 7
Shafadeh, Asghar..........28303 Joy Rd., Garden City
Shafarman, Eugene M...........3790 Woodward, Detroit
Shaffer, Jos. H...........2401 Radnor Dr., Birmingham
Shaffer, Loren W. (R)................P.O. Box 315, Boynton Beach, Fla.
Shafter, Royce R.............1188 Puritan, Birmingham
Shams Avari, Parviz..........27584 Schoolcraft, Livonia
Shanoski, Stanley J.........1910 Dav. Broderick Twr., Detroit 26
Shapiro, Jack............22669 Glastonbury, Southfield
Shapiro, Reuben I.......22341 W. 8 Mile Rd., Detroit
Shaptini, Elias A.......1 Woodward Avenue, Detroit 26
Shargel, Geo. M. J.............1800 Tuxedo, Detroit 6
Sharp, Elwood A. (A)....633 Neff Rd., Grosse Pte. 30
Sharpe, Wm. D...24621 W. McNichols Rd., Detroit 19
Sharrer, Chas. H.............1133 Grayton, Detroit 30

Shea, Francis P.............Harper Hospital, Detroit 1
Shecter, Harry............2200 E. Grand Blvd., Detroit
Sheehan, Irene C...........15520 Garfield, Allen Park
Sheehan, Shelia..........3011 W. Grand Blvd., Detroit
Shekerjian, Armen..............13815 Puritan, Detroit
Shelden, Warren E...14215 W. McNichols Rd., Detroit 35
Shelfoon, Delores J.....20101 Briarcliff Rd., Detroit 48221
Sherman, Marvin......20101 James Couzens, Detroit 35
Sherman, W. La Rue (L)....10 Peterboro St., Detroit 2
Sherman, Wm. L., Jr. (A)......201 E. Kirby, Detroit 1
Sherrin, Edgar R.......19021 W. McNichols, Detroit 19
Shevin, Frederick F.........18450 Livernois, Detroit 21
Shewchuk, A. P.............7300 Allen Rd., Allen Park
Shields, Wm. L.................510 Hildale, Detroit 3
Shiffman, Milton M.....Mt. Sinai Hospital, Detroit 35
Shifrin, Peter G...........20211 Greenfield, Detroit 35
Shin, Eon................1800 Tuxedo Ave., Detroit 6
Shiovitz, Louis..........5419 Michigan Ave., Detroit 10
Shipton, Waldo H. (A)............1875 8th St. South, Naples, Fl. 33940
Shlain, Benj...............19280 Berkeley, Detroit 21
Shors, Clayton M.......20861 Mack, Gro. Pte. Wds. 36
Shortz, Gerald (A)......920 Coquino, Vero Beach, Fla.
Shreve, Alfred J.........4520 Firestone Ave., Dearborn
Shucy, John M.............17198 Oak Dr., Detroit 21
Shufro, Arthur S.........28585 Rivercrest Dr., Southfield
Shulman, Herschel A.........207 Northland Med. Bld., Southfield
Shumaker, Edward J.............75 Lothrop, Detroit 36
Siddall, Roger S. (L)....3011 W. Grand Blvd., Detroit 2
Sieber, Edward H.......6650 Greenfield Rd., Dearborn
Siebert, William E...........23023 Orchard Lake Rd., Farmington
Siefert, John L. (R)........P.O. Box 601, Jupiter, Fla.
Siegel, Henry............19720 Chesterfield, Detroit 21
Siero, Jose M.............9105 Van Dyke, Detroit 13
Sievers, Lorraine A...1457 David Whitney Bg., Detroit 26
Sigler, John W...........Henry Ford Hospital, Detroit
Silbergleit, Allen..1400 Chrysler Expwy., Detroit 48204
Sill, Jacob A.........20861 Mack Ave., Gros. Pte. Woods
Siller, John J.........17000 W. 8 Mile Rd., Southfield
Siller, Theodore N.........19190 Ohio St., Detroit 48221
Sillery, Robt. J...........460 Lakeland, Grosse Pte. 30
Sills, Richard D.........5675 Forman Dr., Birmingham
Silvarman, Israel Z.....9105 Van Dyke Ave., Detroit 13
Silver, Donald F...........467 Fisher Bldg., Detroit 2
Silver, Israel W.........20000 W. Chicago, Detroit 28
Silver, Robert R...............20188 Wakefield, Detroit
Silverman, Maurice M.........17301 W. Eight Mi. Rd., Detroit 35
Silverman, Max........2240 W. Grand Blvd., Detroit 8
Silverstein, M. E...952 Dav. Whitney Bldg., Detroit 26
Silverstein, O. D.......17000 W. 8 Mile Rd., Southfield
Silvestre, Mario S.............19600 Van Dyke, Detroit
Simard, J. E. Henri (A)
Simmons, Donald R.........529 Fisher Bldg., Detroit 2
Simon, Heinz G.............12206 Morang, Detroit 24
Simpson, Gordon E...18101 E. Warren Ave., Detroit 24
Simson, Clyde B...............951 E. Lafayette, Detroit
Singer, Floyd W.......13530 Michigan Ave., Dearborn
Sippola, Geo. W. (L)..13603 La Salle Blvd., Detroit 38
Sivak, B. J.............24665 Santa Barbara, Southfield
Sklar, Manuel..............18400 Schaefer Rd., Detroit
Skully, Edward J...........14000 Linnhurst, Detroit 5
Sladen, Frank J. (L)..Henry Ford Hospital, Detroit 2
Slaughter, Fred M. (L)....2562 Ferry Park, Detroit 8
Slazinski, Leo W. (L)....7618 Michigan Ave., Detroit 10
Slevin, John G.......1132 Whittier Ave., Grosse Pte. Pk.
Sliwin, Edward P.........13244 W. Warren, Dearborn
Slusky, Jos...............854 Fisher Bldg., Detroit 2
Sly, Robt. F...........2101 Monroe Blvd., Dearborn 8
Small, Harvey O. J.......Elliott General Hosp., Detroit
Small, Henry..........15300 W. McNichols Rd., Detroit
Small, John................19223 Conant, Detroit 34
Smathers, Homer M.......17620 W. McNichols, Detroit
Smathers, Ward M.......17620 W. McNichols, Detroit
Smeck, Arthur R. (L)..1036 Waterman Ave., Detroit 9
Smiggen, James J...........19647 Joy Rd., Detroit 28
Smith, Andrew J., Jr...........2950 Puritan, Detroit 38
Smith, Claude A. (L)........7 Adams Lane, Dearborn
Smith, Douglas H.........10151 Michigan, Dearborn 2

Smith, F. Janney (L)..352 Moselle Pl., Gro. Pte. Farms
Smith, Henry L. (L)........16401 Grand River Ave., Detroit 27
Smith, J. Allen..........14140 Puritan Ave., Detroit 27
Smith, Richard H.............5050 Joy Rd., Detroit 4
Smith, Richmond W., Jr.........2799 W. Grand Blvd., Detroit 2
Smith, Roger F.....18755 Wilshire Ave., Lathrup Village
Smith, W. Pierce........Henry Ford Hospital, Detroit 2
Smolenski, John J.......13815 Puritan Ave., Detroit 27
Smyka, Stanley M...........15731 Glenwood, Detroit 5
Snider, Eugene A...........20905 Greenfield, Southfield
Snider, Thomas H.............V.A. Hospital, Dearborn
Snoke, Edwin C...............2901 West Rd., Trenton
Snow, Linwood W. (L)....508 W. Main St., Northville
Snyder, Richard J.........33433 Six Mile Rd., Livonia
Sobel, Robt. A.............18980 Wyoming, Detroit 21
Soble, Allen R.............18241 Greenfield, Detroit 35
Soderberg, Ralph B...7815 E. Jefferson Ave., Detroit 14
Soifer, Sidney................Sinai Hospital, Detroit 35
Sokol, Wm. M.........15800 W. McNichols, Detroit 35
Sokolov, Raymond A...3011 W. Grand Blvd., Detroit 2
Sokolowski, A. H.......5550 Mitchell Ave., Detroit 11
Solberg, Lincoln E.............2021 Monroe, Dearborn
Soleymani, Sion..........4400 Livernois, Detroit 48210
Soller, Alex S.............19309 Greenfield, Detroit 35
Solomon, A. B.............9559 Greenfield, Detroit 27
Solomon, Robert J.........15101 Southfield, Allen Park
Somerville, Thos. H.......36475 Five Mile Rd., Livonia
Sonda, Lewis P. (R)....10951 Farmington Rd., Livonia
Sonda, Lewis P., Jr.........5132 Allen Rd., Allen Park
Songe, Robert A...........Oakwood Hospital, Dearborn
Sorock, Milton L...........19467 Livernois, Detroit 21
Sosa, Carlos M. A.......12960 Lincoln, Huntington Wds.
Sosa, Freddy R. (A)........Detroit Gen. Hosp., Detroit
Sowa, Elizabeth C. (A)
Speck, Carlos C.............6742 Park Ave., Allen Park
Spector, Maurice J.......12938 E. Jefferson, Detroit 15
Speer, David L.......Mt. Carmel Mercy Hosp., Detroit
Sperry, Frederick L. (A)..............490 Arlington, Berkeley, California
Sphire, Raymond D.........4160 John R St., Detroit 1
Spiegelmann, H. L...2075 E. 14 Mile Rd., Birmingham
Spiro, Adolph S..............13240 Harper, Detroit 13
Spiwak, Bertram J.....7407 Cathedral Dr., Birmingham
Springborn, Benj. R. (L)........15818 E. Warren Ave., Detroit 24
Sprunk, Carl J.........2900 Oakwood Blvd., Melvindale
Spurrier, Ethelbert....1553 Woodward Ave., Detroit 26
Squires, Walter M. (R)..............1616 S. 28 Ave., St. Petersburg, Fla.
Stalker, Hugh (R)....Cottage Hospital, Gro. Pte. Frms.
Stamell, Benjamin B.........17000 W. Eight Mile Rd., Southfield
Stamell, Meyer........14634 Greenfield St., Detroit 27
Stanton, James M. (L)..1001 Mutual Bldg., Detroit 26
Stanton, Myron R.....7441 W. 7 Mile Rd., Detroit 21
Stapleton, Wm. J., Jr. (L)..201 E. Kirby Ave., Detroit 2
Staricco, Renato..........3783 Fort St., Lincoln Park
Staryk, Steven E.........1010 N. Oxford Rd., Detroit 36
Statzer, Darrell E............955 Fisher Bldg., Detroit 2
Staub, Howard P. (R).......9210 Jerome, Detroit 39
Staudt, Louis W.............1201 Pilgrim, Birmingham
Stearns, Alexander B...........7430 Second, Detroit 2
Stebbins, Chas. E...705 Northland Med. Bldg., Southfield
Steel, William B.............Hutzel Hospital, Detroit 2
Steepe, Chas. A. D.....20867 Mack, Grosse Pte. Woods
Stefani, Andrew E.........1701 N. Renaud, Detroit 36
Stefani, Ernest L...18455 James Couzens Hwy., Detroit 35
Stefani, Raymond T...........13526 Stoepel, Detroit 38
Steiger, Zwi..................V.A. Hospital, Dearborn
Stein, Albert H.........19334 San Juan Dr., Detroit 21
Stein, Emory.............13115 Woodward, Detroit 3
Stein, Harvey S............22341 W. 8 Mi. Rd., Detroit
Stein, Saul C...............23105 Van Dyke, Van Dyke
Steinbach, A. L...320 Merriweather Rd., Grosse Pte. 36
Steinberger, E. J. (L).......6402 W. Fort, Detroit 9
Steiner, Fredk. B...........7675 Ridge Rd., Plymouth
Steiner, S. D...........3044 W. Grand Blvd., Detroit 2
Steinhardt, Milton J.....18910 Birchcrest, Detroit 48221

Stellhorn, Chester E.........12900 W. Seven Mile Rd., Detroit 35
Stellhorn, Mary C. (A)....16616 Mack Ave., Detroit 24
Stempel, Edward M...18324 Fairfield Ave., Detroit 21
Sterba, Richard F.....18228 Mack Ave., Grosse Pointe
Stern, Julian......15121 W. McNichols Rd., Detroit 35
Stern, Leonard H...........19200 Aften Rd., Detroit 3
Stern, Louis D. (L)..1553 Woodward Ave., Detroit 26
Sternhill, Vernon..............1800 Tuxedo, Detroit 6
Stevens, Chas. H.......Med. Concourse N.C., Southfield
Stevenson, Chas. S...........960 Fisher Bldg., Detroit
Stevenson, Lee B.........Henry Ford Hosp., Detroit 2
Stewart, Maitland N., Jr.....20905 Greenfield, Southfield
Stewart, Marjorie (A)..........581 Golfcrest, Dearborn
Stewart, Robert M...........10933 Farmington, Livonia
Stiefel, Danl. M. (L)........1563 Dav. Whitney Bldg., Detroit 26
Stillwater, Karl............18221 Pennington, Detroit 21
Stith, Dwight E...............505 Owen St., Detroit 2
Stobbe, Godfrey D.............Grace Hospital, Detroit 1
Stock, Thomas B.....25500 Friar Lane, Southfield 48075
Stoeker, Lawrence L.......7310 W. 7 Mile Rd., Detroit
Stocker, Marvin L...........16401 Grand River, Detroit
Stockwell, Benj. W.......1553 Woodward Ave., Detroit
Stokfisz, Thaddeus..........7012 Michigan, Detroit 10
Stoller, Raymond....25210 Grand River Ave., Detroit 40
Stone, Sidney L.....14620 E. Seven Mile Rd., Detroit 5
Stoyka, Michael R.........1977 Oxford, Grosse Pointe
Straith, Richard E.......2605 W. Grand Blvd., Detroit 8
Strand, Martin E.......22400 Cherry Hill, W. Dearborn
Strauss, Ernest G...1024 Blairmoor St., Gro. Pte. Woods
Stricker, Henry D...........5624 W. Fort St., Detroit 9
Strickler, D. T., Jr.....22231 W. Outer Drive, Dearborn
Strickroot, Fred L.........3800 Bishop Rd., Detroit 24
Stronski, G. E...............9901 Whittier, Detroit 24
Stryker, Joan C.........21604 E. River Rd., Grosse Ile
Stryker, Walter A...............P.O. Box 31, Wyandotte
Stubbs, Clayton T. (R)....133 S. Walnut, Mt. Clemens
Stubbs, Harold W. (L)........13930 Woodward Ave., Highland Park
Subrin, Mayer............19230 Canterbury, Detroit 21
Suen, Irene T. S.........7900 Joseph Campau, Detroit
Sugar, H. Saul........18140 San Juan Dr., Detroit 21
Sugarman, Marcus H.....15201 W. McNichols, Detroit 35
Sugayan, Norberto A...Wayne Co. Gen. Hospital, Eloise
Sullivan, Hugh A. (L)....644 Neff Rd., Detroit 48230
Sullivan, Paul J.....26711 Woodward, Huntington Woods
Sullivan, Thomas M.........951 E. Lafayette, Detroit 7
Sultzman, L. Carl......55 Vendome, Gro. Pte. Frms. 36
Summers, Wm. A.......1553 Woodward Ave., Detroit 26
Summers, Wm. S. (L)........524 S. Lakeside Drive, Lake Worth, Fla.
Sutherland, Jacob M. (L)......8900 E. Jefferson Ave., Detroit
Suwinski, Raymond H...9801 Conant Ave., Hamtramck 12
Swan, Donald C...17000 W. Eight Mile Rd., Southfield
Swan, Lionel F................9245 Mack, Detroit 14
Swanson, Carl W............936 Alter Rd., Detroit 15
Swanson, Robt. G...314 Eastland Prof. Bldg., Detroit 36
Swartz, Fred G., Jr...1329 Dav. Whitney Bldg., Detroit 26
Sweeny, Donald N., Jr.....8445 E. Jefferson, Detroit 14
Switzer, Bertrand C. (R)..............1862 Riverside, Columbus 21, Ohio
Syphax, Charles S...........1819 E. Davison, Detroit 3
Szappanyos, G. G. (A)....Hosp. Cantonal De Geneve, Geneva, Switzerland
Szilagyi, D. Emerick....Henry Ford Hospital, Detroit 2
Taber, Rodman E.........Henry Ford Hosp., Detroit 2
Tactac, Albert J.............15244 Middlebelt, Livonia
Talbot, Frank G.................1365 Cass, Detroit 26
Tallant, Edward J.........18041 Greenfield, Detroit 35
Talley, Robt. W...........Henry Ford Hosp., Detroit 2
Talmers, Fredk. N.............V.A. Hospital, Dearborn
Tamblyn, E. J. (L)......737 Marlborough, Detroit 15
Tanay, Emanuel..........861 Fisher Bldg., Detroit 2
Tanner, Natalia M.......8401 Woodward Ave., Detroit 2
Tapert, Julius C. (A)....888 Chalmers Ave., Detroit 15
Tarpinian, Harry........10955 Farmington Rd., Livonia
Tasker, Helen E.......76 W. Adams Ave., Detroit 26
Tassie, Ralph N. (L)......15000 Gratiot Ave., Detroit 5
Tatelis, Gabriel A.......1011 E. Grand Blvd., Detroit 7

Tatelman, Maurice......Wayne State University, Detroit
Taylor, Amos, III.............301 E. Kirby, Detroit 2
Taylor, Junius L..........1566 W. Grand Blvd., Detroit
Taylor, Michael A. (A)..Detroit Receiving Hosp., Detroit
Taylor, Miles.........550 Estld. Prof. Bldg., Detroit 36
Taylor, Nelson M...215 Dean Lane, Grosse Pte. Pk. 36
Taylor, Richard A..........28 W. Adams St., Detroit 26
Taylor, Ward M.......2201 E. Jefferson Ave., Detroit 7
Taylor, Wm. V............17200 E. Warren, Detroit 24
Tazzioli, Henry A..........21970 Moross Rd., Detroit 36
Tear, Malcolm J. J.....862 W. McNichols Rd., Detroit 3
Teitelbaum, Myer.........18510 Meyers Road, Detroit 35
Tellez, Henry (A)..Wayne St. Univ. Hosp. Tng., Detroit
Tenaglia, Thos. A............3180 Fort St., Lincoln Park
Teves, Manuel L...............13020 Mack, Detroit 15
Texter, Elmer C. (L)....7457 Gratiot Ave., Detroit 13
Thomas, Alfred E..............73 E. Palmer, Detroit 2
Thomas, Blanche M..........6535 Allen Rd., Allen Park
Thomas, Leon D..........3019 West Warren, Detroit 8
Thomas, L. Murray..801 Dav. Whitney Bldg., Detroit 26
Thompson, Arthur L............12632 Dexter, Detroit 38
Thompson, Hugh O..........6014 W. Fort St., Detroit 9
Thompson, Wm. A. (R)......12632 Dexter, Detroit 38
Thomson, Danl. C...........2934 Biddle Ave., Wyandotte
Thorley, Lawrence (A)..........Grace Hospital, Detroit
Thornton, Jerry ....525 Visger Rd., Ecorse 29
Thosteson, G. C...1139 Dav. Whitney Bldg., Detroit 26
Thumann, Robt. C...20045 Mack Ave., Grosse Pte. Wds.
Thumim, Sadie...............15306 Joy Rd., Detroit 28
Timma, Richard J...16401 Grand River Ave., Detroit 27
Ting, Yoeh Ming.........16024 Stratford Dr., Southfield
Tkaczuk, Dmytro......10345 Joseph Campau, Detroit 12
Toal, Robert E..........20953 Grand River, Detroit 19
Tobar, Rodrigo R........Maybury Sanatorium, Northville
Todoroff, Theodore G.....22146 Ford Rd., Dearborn 6
Tolbert, Vassal G...3461 W. C. Chrysler Exp., Detroit 1
Tomsu, Chas. L. (L).........16521 Westmoreland Rd., Detroit 19
Torp, Raymond T.....722 Notre Dame, Grosse Pte. 30
Torres, Estelle P............3985 Caniff, Hamtramck 12
Torres, Raul M., Jr........3985 Caniff St., Hamtramck 12
Tourkow, Lawrence P...3290 Sherbourne Rd., Detroit 21
Tourney, Garfield.............Lafayette Clinic, Detroit 7
Townsend, Frank M., Jr.......1055 Trumbull, Detroit 16
Tracey, John M.......15317 W. McNichols, Detroit 35
Traey, Edward G............3411 Evaline St., Detroit 12
Trader, Kenneth N.......3001 W. Grand Blvd., Detroit 2
Treisman, E. J.......15101 W. Seven Mile Rd., Detroit
Tremain, Harold L............15475 Ashton, Detroit 23
Triska, Franz K.....12444 E. Seven Mile Rd., Detroit 5
Troester, Geo. A.................81 E. Kirby, Detroit 2
Trombino, James F. V...8625 Marygrove Dr., Detroit 21
Trotsky, Martin B............7411 Third Ave., Detroit 2
Truba, Paul K............22770 Kelly Rd., East Detroit
Trudgen, Paul E..............1224 Beechmont, Dearborn
Trunsky, Ronald E............Sinai Hospital, Detroit 35
Trupiano, Samuel....420 Eastland Prof. Bldg., Detroit 36
Trythall, S. W...................Box 33, Orchard Lake
Tseng, George T. C..............3419 Sophia St., Wayne
Tukel, Floyd S..................2021 Monroe, Dearborn
Tulloch, John A.....1807 Dav. Whitney Bldg., Detroit 26
Tulloch, John C...1040 Dav. Whitney Bldg., Detroit 26
Tupper, Roy D. (L)..15101 W. 7 Mile Rd., Detroit 19
Turcotte, Vincent J. (A)............Presque Isle 49777
Turkel, Henry......8000 W. Seven Mile Rd., Detroit 21
Turman, Ramon D.......................647 East Avenue, Hamilton, Oh. 45011
Turnbull, Jack V..........22340 Michigan Ave., Dearborn
Turner, Edward T..............5050 Joy Rd., Detroit 4
Turner, Rachel E............3113 Evergreen, Royal Oak
Turner, Robert R..........2841 Monroe Blvd., Dearborn
Tworek, Taisja Z...2 Woodside Park Blvd., Pleasant Ridge
Uddyback, Odie T.....8401 Woodward Ave., Detroit 2
Ujda, Chester J..............32126 Woodbrook, Wayne
Ulmer, Arthur A..........79 Greenbriar, Gro. Pte. Shrs.
Ulrich, Elmer E..............5596 Eastlawn, Detroit 13
Ulrich, John L............23100 Cherry Hill, Dearborn
Ulrich, Willis H.....22365 Grand River Ave., Detroit 19
Unkefer, Wm. T.....15800 W. McNichols Rd., Detroit 35
Urrea, Luis H. (A)............Harper Hospital, Detroit
Usndek, Harold E..........18485 Mack Ave., Detroit 36

Vaitas, Otonas..........10531 Farmington Rd., Livonia
Vaitkevicius, V.....................4160 John R, Detroit
Valdesuso, R. I............14763 Rossini Dr., Detroit 5
Valenzuela, E. Valdes.......1 Waynewood Ct., Dearborn
Valvekens, F. G. P..............1800 Tuxedo, Detroit 6
Van Arsdale, Wm. L. (A)......1000 Chung Cheng Rd., Taipei, Taiwan
Van Becelaere, L. A..............15830 Fort, Southgate
Vanden Berg, H. J., Jr...1553 Woodward Ave., Detroit 26
Vander Yacht, W. C...20211 Ann Arbor Trail, Dearborn
Van Eck, James E...........11540 Morang Dr., Detroit
Van Hoek, Donald E.....20323 Mack, Grosse Pte. Wds.
Van Raaphorst, L. F..............861 Monroe, Dearborn
Van Slyck, E. J...........Henry Ford Hosp., Detroit 2
Vanvalzah, Henry J...Ford Mtr. Co., Miller Rd., Dearborn
Vardon, Edward M..............12897 Woodward Ave., Highland Park 3
Vasu, Vasile O.........4829 Woodward Ave., Detroit 1
Vaughn, Clarence B..............Grace Hospital, Detroit
Veling, William F.......13700 Woodward, Highland Pk.
Vence, Carlos A...13700 Woodward Ave., Highland Pk.
Vera, Ramon W............20905 Greenfield, Southfield
Victor, Jay.................14575 Southfield, Allen Park
Villaflor, Rady I...........Childrens Hospital, Detroit 2
Villarosa, Isaias S. (A)
Vincent, Charles C.............2424 Puritan, Detroit 38
Vincent, John W..............22146 Ford Rd., Dearborn
Villani, Patrick A.......1025 David Whitney, Detroit 26
Vipond, W. Fraser........15398 Gratiot Ave., Detroit 5
Viscomi, Geo. J..............23422 Ford Rd., Dearborn
Visscher, Donald W.......12922 W. Warren, Dearborn
Vokes, Milton D. (L)..10182 Gratiot Ave., Detroit 13
Vonberg, Vollrad J.......432 Eastland Prof. Bldg., Detroit
Vonder Heide, Elmore C...17190 Strathmoor, Detroit 35
Vonglahn, Noel A...........19075 Middlebelt, Livonia
Vorwald, Arthur J...........1401 Rivard St., Detroit 7
Vossler, Albert E.....1144 Dav. Whitney Bldg., Detroit
Wagenberg, Harold R..............20514 Bentler, Detroit
Waggoner, Lyle G.....1010 Professional Pl., Detroit 48201
Wagner, John R............474 Fisher Bldg., Detroit 2
Wagoner, George F.........14300 W. McNichols Rd., Detroit 35
Wahl, Richard A. (M).........17555 Jas. Couzens Hwy, Detroit 35
Wainger, Max J.......15105 W. 7 Mile Rd., Detroit 35
Wainstock, Michael A..........621 David Whitney Bl., Detroit 26
Wakeman, Everal M..........155 S. Denwood, Dearborn
Waldbott, Geo. L.......2930 W. Grand Blvd., Detroit 2
Walker, Frank B., II...1305 Berkshire Rd., Grosse Pte.
Walker, Geo. L.....7815 E. Jefferson Ave., Detroit 14
Walker, Robert M..............2101 Monroe, Dearborn
Walkowiak, Robt. G.....76 W. Adams Ave., Detroit 26
Wallace, Silas W. (L)..7815 E. Jefferson Ave., Detroit 14
Waller, John P.......145 Elk Place, New Orleans, La.
Walser, Howard C.........31815 Southfield, Birmingham
Walt, Alexander J...Detroit Receiving Hosp., Detroit 26
Walter, Arthur W.......14201 Rutland Rd., Detroit 27
Walter, Floyd J.....18714 Grand River Ave., Detroit 23
Wang, Chun Heng H.......25500 Edgemont, Southfield
Wang, Joy Ya Hsiang..........35550 Michigan, Wayne
Warren, Bernice K...........18984 Livernois, Detroit 21
Warren, Irving A...........18984 Livernois, Detroit 21
Warren, Max W.....23120 Valley Crest Ln., Southfield
Wass, Richard A............3815 Pelham Rd., Dearborn
Wasserman, Harold..19001 W. Seven Mile Rd., Detroit 19
Wassermann, Lewis C.........300 W. McNichols Rd., Highland Park 3
Waszak, Chas. J.....26111 Woodward, Huntington Wds.
Waters, William L.......19203 Grand River, Detroit 23
Watson, Harwood G.....935 S. Military Ave., Dearborn
Watson, James E., Jr...18524 Grand River, Detroit 23
Watts, Fredk. B............16321 Mack Ave., Detroit 24
Watts, John C................7360 12th Street, Detroit
Watts, Jos. G.............20905 Greenfield, Southfield
Wayne, Morris A.....15930 Livernois Ave., Detroit 38
Weaver, Clarence E. (R)........1260 S.E. Fourth Ct., Deerfield Beach, Fla.
Weaver, Delmar F.............1100 Bishop, Detroit 30
Weber, Karl W.....18101 E. Warren Ave., Detroit 24

Weber, Richard C.........R. 1, Manthei Rd., Box 87A, Petoskey 49770
Weber, Richard E.....420 Ballenger Hwy., Flint 48504
Webster, Jeremy D.........20045 Mack, Grosse Pointe
Webster, John E. (A)........47 Pine Court, Detroit 36
Weckstein, Marvin S...28290 Tavistock Trail, Southfield
Weed, Milton R...1059 Berkshire Rd., Grosse Pte. Pk. 30
Wehenkel, Albert M. (L)......7356 12th St., Detroit 6
Wehr, Maurice B.........2355 Fort Street, Lincoln Park
Weidner, John H.........25701 Joy Rd., Dearborn Hts.
Weiksnar, John F..............1800 Tuxedo, Detroit 6
Weiner, Allen D.......21415 W. Eight Mile, Detroit 19
Weiner, Maurice B.........20211 Greenfield, Detroit 35
Weingarden, David (L)......15 Alger Pl., Grosse Pointe
Weinstein, Jacob....4237 Grand River Ave., Detroit 8
Weisberg, A. Allen....20 W. Seven Mile Rd., Detroit 3
Weisberg, Harry..15101 W. McNichols Rd., Detroit 35
Weisberg, Jacob (A).......15101 W. McNichols Rd., Detroit 35
Weisenthal, Irvin I.....5764 Woodward Ave., Detroit 2
Weiss, Casimir P............10036 Jos Campau, Detroit
Weissman, Fredrick....20905 Greenfield Rd., Southfield
Welch, John H.......18550 W. Outer Dr., Dearborn 7
Wells, Herschel J.......Wayne Co. Gen. Hosp., Eloise
Wells, Martha L. (A)..............584 Pilgrim Rd., Birmingham 48009
Welsh, Gary J. O................3919 John R, Detroit
Weltman, Carl G. (A)..........R.R. 2, Snead Island, Palmetto, Florida
Wenokur, Milford E...26070 Meadow Dr., Franklin 48025
Wenzel, Jacob F.........18555 E. Warren, Detroit 36
Werle, Peter P.....62 Greenbriar Lane, Grosse Pte. Shrs.
Wertz, Wm. J..............2405 W. McNichols, Detroit
West, Howard J...............Harper Hospital, Detroit
West, Malcolm E...........6309 Charlevoix, Detroit 7
Weston, Bernard........20403 Snowden Ct., Detroit 35
Weston, Earl E...18101 Jas. Couzens Hwy., Detroit 35
Weston, Horace L.........28 W. Adams St., Detroit 26
Weyher, Russell F.......5383 Oakman Blvd., Detroit 4
Whalen, Neil J. (L)..1553 Woodward Ave., Detroit 26
Whaley, Robert L.........3150 Second Ave., Detroit 1
Wharton, Thos. V.............1809 Oak St., Wyandotte
Wheatley, Charles E...........4407 Roemer, Dearborn
Wheeler, Stewart C...........18901 W. McNichols Rd., Detroit 19
Whelan, Jos. L.............1360 Oxford Rd., Detroit 36
White, Daniel B. (M)..........555 Med. Sur. Flight, A.P.O. San Francisco, Cal.
White, Donal L...........Henry Ford Hospital, Detroit
White, Donald H.............20685 Meridian, Grosse Ile
White, Jacob E.............3413 McDougall, Detroit 7
White, Milton W...........1439 E. Outer Dr., Detroit 34
White, Prosper D.......58 W. Adams Ave., Detroit 26
White, Theodore M.........7159 Michigan, Detroit 1
Whitehead, Leston S...1553 Woodward Ave., Detroit 26
Whitehead, Walter K...17800 E. Eight Mile Rd., Detroit
Whitehouse, Fred W.....2799 W. Grand Blvd., Detroit 2
Whiteley, Robt. K.........608 Estlnd. Cen. Prof. Bldg., Detroit 36
Whitelock, Edward H.........1809 Oak St., Wyandotte
Whitman, James E...........3920 E. Eight Mile Rd., Detroit 48234
Whitney, Elmer L. (L)..2 Kenberton Rd., Pleasant Ridge
Whitroek, Robt. M...20250 Mack Ave., Grosse Pointe 36
Whittaker, Alfred H. (L)....17000 E. Jefferson Ave., Grosse Pte. 30
Whitten, James I.............21223 Harvard, Southfield
Wiechowski, Henry E...10345 Joseph Campau, Detroit 12
Wiener, Israel....13011 W. McNichols Rd., Detroit 35
Wiener, Morton J...........150 Livernois, Ferndale 20
Wietersen, Fred K.........18700 Meyers Rd., Detroit 35
Wikiera, Edward S...........15120 Michigan, Dearborn
Wilcox, Leslie F.....505 Middlesex Rd., Grosse Pt. Park
Wilhelm, Rudolf E.....751 S. Military Rd., Dearborn 7
Wilhelm, Seymour K...13011 W. McNichols, Detroit 35
Wilkins, Robert B. (A)..Detroit General Hosp., Detroit
Wilkinson, Arthur P. (R)............4840 Willow Lane, Orchard Lake
Willard, Rodney E. (A)............197 Hillside Dr., South Windsor, Ct.
Williams, Delford G...........5050 Joy Rd., Detroit 4
Williams, Earl R...............4407 Roemer, Dearborn
Williams, Eugene W.........6246 Chase Rd., Dearborn
Williams, John H.........18633 Mack Ave., Detroit 36
Williamson, W. A.......2585 W. Grand Blvd., Detroit 8
Willis, Robt. L., Jr...........Harper Hospital, Detroit
Willoughby, Wm. A..........974 Fisher Bldg., Detroit 2
Wilner, Freeman M.........15001 W. Eight Mile Rd., Detroit 35
Wilner, Irvin A.......17701 McNichols Rd., Detroit 35
Wilson, Andrew G...19203 Grand River Ave., Detroit 23
Wilson, Francis M...........15439 Harper, Detroit 24
Wilson, Gerald A. (L)..19203 Grand River, Detroit 23
Wilson, Gerald S.......3011 W. Grand Blvd., Detroit 2
Wilson, Ian D...........19203 Grand River, Detroit 23
Wilson, Merton C.......15439 Harper Ave., Detroit 24
Wilson, Robert F.....Detroit Receiving Hosp., Detroit 26
Wimmer, Helmut..Detroit General Hospital, Detroit 26
Winnick, Lawrence C...13340 W. 7 Mile Rd., Detroit 35
Winton, Geo. J..........1150 Griswold St., Detroit 26
Wise, Robt. K.......17640 W. 12 Mile Rd., Southfield
Wishropp, Edward A.......20250 Mack, Grosse Pte. 36
Withey, Grant J...............7430 Second, Detroit 2
Wittenberg, Arthur A...7101 W. Chicago Blvd., Detroit 4
Wittenberg, D. H.........950 E. State Fair, Detroit 3
Wittenberg, Samson S.......18718 Woodward, Detroit 3
Wittenberg, Sydney S...4400 Livernois Ave., Detroit 10
Witter, Jos. A.......344 Glendale Ave., Highland Park 3
Witus, Morris (A)....1500 Bay Rd., Miami Beach, Fla.
Wlodarczyk, A. J.............4401 Conner, Detroit 15
Wolfe, John N.............432 E. Hancock, Detroit 1
Wolfe, Max O.........7-260 Gen. Mtrs. Bldg., Detroit 2
Wolfson, Wm. O..............3000 Seminole, Detroit 14
Wolodzko, Joseph...........32900 Five Mile Rd., Livonia
Wolter, James G...Mt. Carmel Mercy Hosp., Detroit 35
Womack, Melisande..........1800 Tuxedo, Detroit 6
Wood, Alfred L...........23100 Cherry Hill, Dearborn
Wood, Douglas J...........2860 Clark Ave., Detroit 10
Wood, Kenneth A...........3919 John R St., Detroit 1
Wood, Wilford C.......3011 W. Grand Blvd., Detroit 2
Woodbury, Ralph F...........21223 Mack, Grosse Pte.
Woodley, Bernard J...........3700 West Rd., Trenton
Woods, Joseph J...........18255 W. McNichols, Detroit
Woolfenden, Jos. B...............1215 Three Mile Dr., Grosse Pte. Park
Worrell, Calier H.......20250 Mack, Grosse Pt. Woods
Worzniak, Jos. J.........2312 Biddle Ave., Wyandotte
Wreggit, Winston R.................17 Colorado Ave., Highland Park 3
Wright, Charles H...........50 Westminster, Detroit 2
Wu, Clyde Ying Chau........825 Dav. Whitney Bldg., Detroit 26
Wyatt, Rudolph A.........2785 S. Fort St., Detroit 17
Wybranowski, Jan........17644 W. Warren, Detroit 28
Wylie, John H...........Henry Ford Hosp., Detroit 2
Yarjanian, Ara..............3815 Pelham Rd., Dearborn
Yarrows, Morton I...........455 Medbury St., Detroit 2
Yates, Arthur J. W................16355 E. Jefferson, Grosse Pointe Pk.
Yesayian, H. G. (L)........609 Kales Bldg., Detroit 26
Yetzer, Wm. J.........20211 Ann Arbor Trail, Dearborn
Yoder, Robt. R................20189 Whipple, Northville
Yott, Wm. J.............854 Lakeshore Rd., Detroit 36
Young, David J.......19820 Plymouth Road, Detroit 28
Young, Donald A...14807 W. McNichols Rd., Detroit 35
Young, Donald C. (R)..43875 Nine Mile Rd., Northville
Young, Frank A...............344 Glendale, Detroit 3
Young, Irving I........32280 Shrewsbury, Farmington
Young, Richard D.....31500 Schoolcraft, Livonia 48150
Young, Viola M. (L)........10 Peterboro St., Detroit 1
Youngstrom, Clarence S.......8004 Lochdale, Dearborn
Zabinski, Edward J.......585 Ballantyne Rd., Detroit 36
Zadeh, A. T...........27489 W. Six Mile Rd., Livonia
Zager, Bernard S.......23063 Plumbrooke Dr., Southfield
Zako, Louis................7720 Allen Rd., Allen Park
Zaleski, Edward J...........4520 Firestone, Dearborn
Zane, Alan Irving (A)..4114 Cork St., Corpus Christi, Tx.
Zara, Sabah E..................15830 Fort, Southgate
Zavell, Paul M.....1932 Broadstone, Grosse Pte. Woods
Zawacki, Sigmund G.........22146 Ford Rd., Dearborn
Zawadzki, Edward S.....14961 Piedmont Ave., Detroit 23
Zbikowski, Jos.......Wayne Co. Genl. Hospital, Eloise

Zbikowski, Z. T..........31500 Schoolcraft Rd., Livonia
Zbudowski, Myron R.........10040 Jos. Campau Ave., Detroit 12
Zelenock, Michael N.............15830 Fort, Southgate
Zemaitis, Petras..............33000 Palmer Rd., Wayne
Zemens, Jos. L...........11420 E. 9 Mlie Rd., Warren
Zevallos, Carlos........5800 W. Fort St., Detroit 48209
Ziegler, Robt. F.......Henry Ford Hospital, Detroit 2
Zimberg, Leslie L. (A)........Grace Hospital, Detroit
Zinn, Geo. H. (L)......1553 Woodward Ave., Detroit 26
Zirkin, Richard M.....3105 Carpenter Avenue, Detroit 12
Zobl, Eldred........Dearborn V.A. Hospital, Dearborn
Zohoury, Nasser....18800 Woodward Ave., Detroit 48203
Zolliker, Margaret Z.........289 Moross, Grosse Pointe
Zubroff, L. S................760 Fisher Bldg., Detroit 2
Zuelzer, Wolf W.........5224 St. Antoine St., Detroit 2
Zukowski, Henry J.........72 N. Deeplands, Detroit 36
Zukowski, Sigmund A...6626 Van Dyke Ave., Detroit 13
Zwirkoski, T. S........25000 W. 10 Mile Rd., Southfield
Zylik, Michael K.....St. Joseph Mercy Hosp., Detroit 11

Honorary Members

Brake, D. Hale
Burns, Wm. J.
Cline, John W.
DeKruif, Paul
Johnson, Donald E.
Upjohn, Lawrence N.
Crosby, E. C.
Patten, Bradley M.
Kahn, Reuben L.

Michigan's Newest Convention Resort

. . . invites you to enjoy the services and care we provide for everyone — every minute — at Boyne Highlands.

Your convention or conference gathered here will find a large staff, seasoned in the Boyne tradition, ready and willing always . . . yet never over-anxious.

Boyne Highlands is a World Apart . . . snuggled in commanding hills. Golf, tennis, swimming are yours, along with scenic chair-lift rides. Sailing too, on beautiful Little Traverse Bay. And, you're right in the heart of fishing country, including our private trout pond only steps away from your air-conditioned room.

A complete social, sports and entertainment program for you and yours . . . in this World Apart. We warmly invite your inquiry for complete details.

Conference Check List:

☐ 16,000 square feet, air-conditioned for conferences and exhibits.
☐ Complete conference accommodations for 200.
☐ Variety of smaller conference rooms.
☐ Convenient airline transportation (15 minutes.)
☐ Modern audio-visual equipment.
☐ Comprehensive conference and convention planning service.
☐ 2 dining rooms . . . 2 cocktail lounges.

Boyne HIGHLANDS RESORT INN
HARBOR SPRINGS • MICHIGAN
Phone Harbor Springs 1521

NED TANNER — Conference Consultant

Michigan State Medical Society

Directory of Members, 1966

Alphabetical List

COUNTY SOCIETIES BY CODE NUMBERS

Allegan	10
Alpena-Alcona-Presque Isle	14
Barry	18
Bay-Arenac-Iosco	22
Berrien	26
Branch	30
Calhoun	34
Cass	38
Chippewa-Mackinac	42
Clinton	46
Delta-Schoolcraft	50
Dickinson-Iron	54
Eaton	58
Genesee	62
Gogebic	66
Grand Traverse-Leelanau-Benzie	70
Gratiot-Isabella-Clare	74
Hillsdale	78
Houghton-Baraga-Keeweenaw	82
Huron	86
Ingham	90
Ionia-Montcalm	94
Jackson	98
Kalamazoo	102
Kent	106
Lapeer	110
Lenawee	114
Livingston	118
Luce	122
Macomb	126
Manistee	130
Marquette-Alger	134
Mason	138
Mecosta-Osceola-Lake	142
Menominee	146
Midland	154
Monroe	158
Muskegon	162
Newaygo	166
North Central	150
Northern Michigan	170
Oakland	174
Oceana	178
Ontonagon	182
Ottawa	186
Saginaw	190
St. Clair	194
St. Joseph	198
Sanilac	202
Shiawassee	206
Tuscola	210
Van Buren	214
Washtenaw	218
Wayne	222
Wexford-Missaukee	226

Name	*County Code*	*Page*
Aach, Hugo A.	102	46
Aardema, Austin A.	162	56
Abbott, James A.	222	68
Abbott, R. Roderick	62	39
Abbott, Vernon C.	174	57
Abbrecht, Martin M.	222	68
Aben, Gerald J.	222	68
Aboassaly, Michel	222	68
Aboulafia, Elie D.	222	68
Abraham, A. O.	114	52
Abraham, Jos. P.	222	68
Abruzzo, Anthony M.	110	52
Ackerman, Gerald L.	190	62
Acocks, James R.	134	54
Acosta, Julio B.	222	68
Adair, Robin	174	57
Adamian, Gerald D.	222	68
Adams, Albert C.	62	39
Adams, Burnell H.	62	39
Adams, Charles	90	43
Adams, Ellis W.	98	45
Adams, Frank A.	106	48
Adams, Fredk. M.	174	57
Adams, James R.	222	68
Adams, Uriah M.	38	38
Adams, Vincent B.	222	68
Adamski, Arthur	222	68
Addison, Earl R.	54	39
Adelson, Seymour S.	222	68
Adelson, Sidney L.	222	68
Adler, Morton W.	222	68
Adler, Sidney	222	68
Advani, Ram	106	48
Agate, Geo. H.	90	43
Agin, L. J.	34	37
Agneberg, Nils O.	146	55
Agnew, Geo. H.	222	68
Agnone, Eugene J.	222	68
Agnone, Peter M.	222	68
Ahronheim, Jacques H.	98	45
Aiken, Donald J.	90	43
Aitken, Geo. T.	106	48
Aiuto, Jas. J.	222	68
Ajemian, Edward P.	102	46
Ajlouni, Issa S.	222	68
Ajluni, Roger M.	222	68
Akroyd, Cecil	222	68
Alban, Emil J., Jr.	222	68
Albers, G. Donald	106	48
Albert, Millard J.	190	62
Albers, Robt.	186	62
Albert, Donald G.	174	57
Albert, Saml. G.	66	41
Albrecht, Albert J.	222	68
Albrecht, Robt. W.	174	57
Albright, Aronld A.	34	37
Alcorn, Kent A.	22	36
Alcorn, Marshall W.	22	36
Aldrich, Addison B.	82	43
Aldrich, Alfred L.	74	42
Aldrich, Leonard C.	82	43
Aldrich, Napier S.	30	37
Aldridge, Chas. W., Jr.	106	48
Alexander, Allen	222	68
Alexander, C. A.	102	46
Alexander, Don K.	218	65
Alexander, Eugene J.	222	68
Alexander, G. D.	222	68
Alexander, James H.	126	53
Alexander, Joseph B.	174	57
Alexander, L. C.	222	68
Alexander, Reuben G.	90	43
Alexander, Wm. H.	54	39
Alfenito, Felix S., Jr.	106	48
Alfonso, Manuel A.	222	68
Alford, Barry H.	218	65
Alford, Elvis S.	222	68
Alger, George D.	106	48
Aliferis, Peter	14	35
Alkema, Henry D.	106	48
Allaben, Robert D.	222	68
Allen, Arthur D.	22	36
Allen, Arthur W.	218	65
Allen, Duane M.	98	45
Allen, John V.	222	68
Allen, Julian	174	57
Allen, L. Willis	106	48
Allen, Ralph V.	106	48
Allen, R. H.	34	37
Allen, Richard J.	218	65
Allen, Richard T.	162	56
Allen, Robt. F.	170	57
Allen, Russell A.	114	52
Allis, Harry D.	90	43
Allison, Herbert C.	222	68
Allott, Hugh R.	42	38
Alm, Bernard T.	170	57
Alpern, E. Bryce	222	68
Alpiner, Sam	222	69
Alt, William J.	162	56
Altland, John V. K.	90	43
Altman, Jules	222	69
Altman, Raphael	222	69
Altshuler, Ira M.	174	57
Alvarez, Ana G.	222	69
Alvarez, Herman, Jr.	222	69
Alvarez, Julian	222	69
Alvarez, Mercedes	126	53
Alvey, Charles R.	222	69
Amato, Robt. M.	62	39
Ambrose, Robt. H.	126	53
Ames, Florence D.	158	55
Amolsch, Arthur L.	134	54
Amos, Norman H.	34	37
Amos, Norman O.	34	37
Anaya, Jacinto M.	174	57
Anderson, Beverly L.	222	69
Anderson, Chas. P.	222	69
Anderson, David G.	218	65
Anderson, D. Hess	94	45
Anderson, Donald T.	54	39
Anderson, Francis C.	50	39
Anderson, Gerhard D.	218	65
Anderson, Harley H.	62	39
Anderson, Harold E.	34	37
Anderson, Jerry W.	106	48
Anderson, John L.	62	39
Anderson, Karl A.	106	48
Anderson, Norma	210	64
Anderson, Robert E.	62	39
Anderson, Walter L.	222	69
Anderson, Wm. K.	190	62
Andrakovich, F.	174	57
Andre, Harvey M.	106	48
Andreou, Byron	222	69
Andrews, Sherman E.	102	46
Andrews, Thomas E.	102	46
Angammal, N.	174	57
Angell, Howard H.	102	46
Anglin, Walter M.	102	46
Annessa, Domenico M.	222	69
Annessa, G. W.	162	56
Ansley, Mary K.	222	69
Antell, Richard A.	62	39

Name	*County Code*	*Page*
Anthony, Geo. E. R.	62	39
Antle, Robert C.	22	36
App, Robt. G.	190	62
Appel, Ben A.	102	46
Appel, Saul	98	45
Appel, William	102	46
Appell, Lloyd E.	102	46
Appelman, Howard B.	222	69
Arabaci, Niara T.	218	65
Arcari, Frederico A.	222	69
Archambault, Henry A.	222	69
Archambault, Rene F.	222	69
Archibald, Donald H.	182	61
Arehart, Burke W.	222	69
Arellano, Miguel A.	126	53
Arena, Joseph A., Jr.	174	57
Arends, Norman J.	222	69
Arendshorst, Wm.	186	62
Arent, John G.	222	69
Aries, C. T.	222	69
Arminski, Thos. C.	222	69
Armovit, Herminio	114	52
Armstrong, Arthur G.	222	69
Armstrong, Mac J.	222	69
Armstrong, Robt. J.	102	46
Arnkoff, Harry	174	57
Arnkoff, Morris	222	69
Arnold, Alfred L., Jr.	206	64
Arnold, Effie E.	222	69
Arnold, George K.	34	37
Arnold, Wm. J., Jr.	222	69
Arnoldi, Forrest J.	222	69
Arons, Roy E.	174	57
Arrington, Robyn J.	222	69
Arscott, Edward F.	14	35
Asbury, Richard B.	22	36
Ascher, Meyer S.	222	69
Ashare, Raymond	174	57
Ashby, Robert N.	106	48
Ashe, Stilson R.	222	69
Ashley, Lowell B.	222	69
Askam, Ralph F.	162	56
Asline, John N.	22	36
Asplund, Charles M.	142	54
Asselin, David C.	90	43
Asselin, Dean R.	26	36
Asselin, Regis F.	222	69
Atchison, Russell M.	218	65
Athay, R. M.	154	55
Atkinson, Annie L.	162	56
Atkinson, Robert L.	26	36
Atler, Lawrence R.	222	69
Auble, Max E.	222	69
Audretsch, Frank E.	126	53
August, Harry E.	222	69
August, Ralph V.	162	56
Aulie, Hal G.	174	57
Ause, Robert G.	218	65
Austin, Donald C.	222	69
Austin, Eugene S.	206	64
Austin, Justus J.	22	36
Austin, Shirley	222	69
Ausum, John D.	222	69
Averill, Walter C.	190	62
Avery, Noyes L., Jr.	106	48
Avrin, Ira	222	69
Awes, Lorraine E.	174	57
Axelrod, Arnold R.	222	69
Axelrod, Robt. G.	174	57
Aydogan, Enver	102	46
Azuela, Victor	34	37
Babcock, Lloyd K.	222	69
Babcock, Myra E.	222	69
Babcock, Warren W.	222	69
Bach, Norman F.	206	64
Bach, Walter F.	222	69
Bacher, Burton J.	222	69
Bachman, Morris E.	222	69
Bacon, Chas.	30	37
Bacon, Herbert G., Jr.	138	54
Bacon, Vinton A.	222	69
Bader, Benj. H.	222	69
Badgley, Carl E.	218	65
Badgley, Waldo O.	90	43
Bady, Arthur J.	222	69
Baeff, Michael A.	222	69
Baer, Geo. J.	222	69
Baer, Marga	222	69
Baer, Walter	222	69
Bagley, Harry E.	222	69
Bahra, Robt. J.	222	69
Baier, Kurt	174	57
Bailey, James E., Jr.	30	37
Bailey, John H.	26	36
Bailey, Louis J.	222	69
Bailey, Robt. S.	194	63
Bailey, Robert W.	218	65
Baima, Margaret A.	222	69
Baird, Walter M.	218	65
Baird, W. Claire	62	39
Baker, Clarence	222	69
Baker, Frederick A.	174	57
Baker, Geo. M.	98	45
Baker, Jerald F.	74	42
Baker, Ophelia P.	150	55
Baker, Robert J.	106	48
Baker, Thomas A.	150	55
Baker, Thos. C.	90	43
Bakken, Richard L.	34	37
Bakker, Durward J.	106	48
Bakst, Joseph A.	222	69
Balaga, Frank T.	222	69
Balberor, Harry	222	69
Balcerski, Matthew A.	222	69
Balcneua, Edgar P.	190	62
Bald, Fredk. W.	62	39
Balian, John V.	222	69
Balice, F. W.	114	52
Ballard, Donald R.	222	69
Ballard, James H.	210	64
Balow, Ross M.	222	69
Balser, Chas. W.	222	69
Balyeat, Gordon W.	106	48
Bandera, Emily A.	218	65
Bandera, Jaroslav M.	218	65
Bandy, Festus C.	42	38
Banghart, Norman L.	218	65
Baniriah, Nana N.	222	69
Banish, Gerald	222	69
Banks, Thomas L.	222	69
Banner, Lawrence R.	102	46
Bannow, Robt. J.	174	57
Banting, Kenneth C.	194	63
Barak, Lewis R.	222	69
Barak, Stuart	222	69
Baran, Alphonse W.	222	69
Barbaglia, Louis C.	222	69
Barber, Radivoj R.	222	69
Barbour, David A.	62	39
Barbour, Fleming A.	62	39
Barden, Stuart P.	34	37
Bardenstein, Maxwell B.	222	69
Barefield, Alwin S.	222	69
Barenholtz, Benj.	222	69
Baribeau, Roy H.	34	37
Barillas, Oscar G.	222	69
Barker, Chas. P.	174	57
Barker, David H.	222	69
Barker, Howard B.	174	57
Barker, John G.	126	53
Barker, Paul S.	218	65
Barker, V. D.	178	61
Barland, Oscar	222	69
Barlow, Myron	222	69
Barlow, Peter P.	174	57
Barlow, R. Craig	218	65
Barnes, Bradley T.	174	57
Barnes, Donald J.	174	57
Barnes, James W.	162	56
Barnes, Van D.	222	69
Barnett, James M.	162	56
Barnett, Louis L.	222	69
Barnett, Morton	222	69
Barnett, Robert F.	226	68
Barnhardt, R. A.	222	69
Barofsky, Gerald F.	106	48
Barone, C. Gerald	222	69
Barr, Norman L.	174	57
Barrett, C. D., Jr.	222	69
Barrett, C. D., Sr.	158	55
Barrett, John L.	174	57
Barrett, Raymond J.	222	69
Barrett, Wyman D.	222	69
Barrios, Honorato	82	43
Barron, James	222	69
Barron, Robert A.	174	57
Barron, Walter L.	218	65
Barron, Wm. H.	222	69
Barry, Alexander	218	65
Bernier, A. Barroso	50	39
Barrows, Winona M.	102	46
Barry, Jack L.	190	62
Barry, Leroy G.	190	62
Barry, Manley L.	102	46
Barsch, Henry J.	174	57
Barsky, David	222	69
Barss, J. A.	194	63
Barss, Wm. A.	218	65
Barstow, Donald K.	74	42
Barstow, Richard G.	150	55
Bartek, Gordon L.	106	48
Bartholomew, Lee E.	218	65
Bartolo, Anthony H.	222	69
Barton, Jos. R.	222	69
Barton, Thos. A.	118	52
Bartone, John R.	70	42
Baruch, Robert J.	222	69
Basel, Arthur R.	222	69
Bash, Theodore L.	50	39
Basinger, Clair E.	106	48
Baske, Franklin W.	62	39
Baskin, Sidney	222	69
Bass, Thos. J.	218	65
Bass, Vernon V.	190	62
Bassett, Robt. C.	90	43
Bassow, Paul H.	218	65
Batchelor, Thomas M.	222	69
Batdorf, Joseph T.	62	39
Bateman, Lawrence G.	62	39
Bateman, William T.	102	46
Bates, Gaylord S.	222	69
Bates, Morton P.	78	42
Bates, Richard	90	43
Battle, John M.	222	69
Battley, John C. S.	194	63
Bauer, A. Robert, Jr.	74	42
Bauer, A. Robt.	222	69
Bauer, Benedict J.	222	69
Bauer, Bruce D.	174	57
Bauer, Edward G.	174	57
Bauer, Ernest W.	174	57
Bauer, Ernest W., Jr.	174	57
Bauer, Franz	174	57
Bauer, Gerhard H.	218	65
Bauer, Jere M.	218	65
Bauer, Lester E.	222	69
Bauer, Ralph E.	222	69
Bauer, Raymond B.	222	69
Bauer, Theodore I.	90	43
Baugh, Evelyn F.	222	69
Baugh, Richard H.	222	69
Baugh, Robert F.	222	69
Baughman, Fred A., Jr.	106	48
Baum, Wm. C.	106	48

Name	*County Code*	*Page*
Baumer, Moe	222	69
Baumgarten, Elden C.	222	69
Baumgarten, Thos. W.	222	69
Bautista, Leandre I.	94	45
Baxter, Seymour	222	69
Baybura, Orhan	110	52
Bayles, John G.	222	69
Baylis, Shelby M.	174	57
Bazil, Gilbert M.	222	69
Beach, Watson	222	69
Beaghler, R. L.	182	61
Beal, Gerald N.	26	36
Beall, John G.	70	42
Beam, A. Duane	222	69
Beamer, Geo. D.	222	69
Beard, James E.	222	69
Beard, Jeriel A.	106	48
Beaton, James H.	106	48
Beattie, Willard G.	174	57
Beatty, James B.	30	37
Beaubien, Mark S.	90	43
Beauregard, Wm. L.	222	69
Beck, Douglas R.	62	39
Beck, Frank K.	194	63
Beck, Otto O.	174	57
Beck, Stanley M., Jr.	222	69
Becker, Abraham	222	69
Becker, Eugene B.	62	39
Becker, Harry F.	34	37
Becker, Myron G.	74	42
Becker, Paul M.	174	57
Beckett, Morley B.	218	65
Beckett, Peter G. S.	222	69
Beckett, Victoria L.	222	69
Becklein, Clarence L.	222	69
Beckman, Hugh	222	69
Beckwith, Carl C.	222	69
Beckwith, Sidney A.	98	45
Bedell, Archie A.	222	69
Bedo, Andrew V.	74	42
Bedwell, Wm. L.	222	69
Beebe, Willard E.	222	69
Beecher, Alvin J.	126	53
Beekhuis, G. Jan	222	69
Beeman, Carl B.	106	48
Beer, Jos. F.	194	63
Beernink, Ernest H.	186	62
Beets, W. Clarence	106	48
Beeuwkes, L. E.	222	69
Behan, Robt. C.	222	69
Behen, Wm. C.	90	43
Behme, C. Peter	190	62
Behney, Charles A.	90	43
Behrman, Saml.	218	65
Beierwaltes, Wm. H.	218	65
Beison, Richard A.	218	65
Beitman, Max R.	222	69
Belanger, W. Geo.	222	69
Belden, Darwin F.	222	69
Belknap, Warren F.	174	57
Bell, Chas. M.	106	48
Bell, J. Kenner	222	69
Bell, Margaret	218	65
Bellinger, Don H.	190	62
Bellinger, Ernest G.	90	43
Belser, Walter	218	65
Benavides, Claude	222	69
Bende, Sandor F.	222	69
Bender, Leonard F.	218	65
Benedek, Elissa P.	218	65
Benedict, Arthur L.	162	56
Beninson, Joseph	222	69
Benisek, George J.	106	48
Benjamin, Howard G.	106	48
Benjamin, Mac B.	154	55
Benkert, Jack	62	39
Benner, Wm. H.	26	36
Bennett, Donald R.	154	55
Bennett, Geo. W.	46	38
Bennett, Germany E.	222	69
Bennett, Harry B.	222	69
Bennett, H. Stanley	222	69
Bennett, James A.	222	69
Bennett, Keith F.	102	46
Bennett, Matthew C.	134	54
Bennett, Sanford A.	222	69
Bennett, W. Bruce	94	45
Bennett, Wm. D.	106	48
Bennett, Wm. G.	194	63
Bennish, Arvin	222	69
Bennish, E. Leo	222	69
Benoit, Merrill P.	174	57
Benson, Clifford D.	222	69
Benson, Davis A.	222	69
Benson, Gilbert W.	50	39
Benson, H. Curtis	102	46
Benson, John C., Jr.	62	39
Benson, Paul J., Jr.	218	65
Benson, Paul J.	222	69
Benson, Roland R.	106	48
Benson, Ronald M.	218	65
Benson, Virginia M.	222	70
Bentley, Fredk. E.	218	65
Bentley, Jack P.	98	45
Bentley, Mary E. N.	98	45
Bentley, M. D.	226	68
Bentley, Robert H.	222	70
Bentley, Wm. G.	222	70
Benz, Carl A.	114	52
Berdayes, Pedro P.	222	70
Berden, Eleanor A.	90	43
Berens, Burdette M.	70	42
Berg, Lawrence A.	198	64
Berg, Richard H.	58	39
Berge, Richard E.	90	43
Bergeon, Milton C.	90	43
Berger, Chas. J.	174	57
Berger, Edwin L.	222	70
Berghorst, John	34	37
Berghuis, John	114	52
Bergin, Jos. H.	74	42
Berglund, Thomas R.	102	46
Berglund, Victor A.	102	46
Bergman, Gary D.	222	70
Bergman, Murray S.	222	70
Bergman, Theodore I.	222	70
Bergo, Howard L.	222	70
Bergsma, Stuart	106	48
Berkas, Ernest M.	222	70
Berke, Joseph J.	222	70
Berke, Sydney S.	222	70
Berker, Isak O.	110	52
Berlin, Allen B.	222	70
Berman, Bernard D.	174	57
Berman, Charles	222	70
Berman, Gilbert M.	174	57
Berman, Harry	62	39
Berman, Lawrence	222	70
Berman, Robt. H.	222	70
Berman, Sidney L.	222	70
Bernard, Henri	222	70
Bernard, Walter G.	222	70
Bernbaum, Bernard	222	70
Berner, Gerald P.	62	39
Bernier, Jos. A.	154	55
Bernstein, Eli N.	62	39
Bernstein, Saml. S.	222	70
Bernys, Conrad F.	222	70
Berridge, Wm. L.	222	70
Berry, Ivor, Jr.	102	46
Berry, Jos. E.	222	70
Berry, Robert E. L.	62	39
Berry, Robt. F.	134	54
Bertram, Karl R.	222	70
Bertrand, Marc G.	190	62
Bertucci, Jos. P.	134	54
Besancon, John H.	222	70
Best, J. A.	62	39
Best, Thos. H. E.	222	70
Betanzos, G.	222	70
Bethards, Rolland E.	90	43
Betz, Eldean G.	102	46
Beukema, Marenus J.	106	48
Beuker, John T.	174	57
Bevez, Frank L.	90	43
Beyer, Geo. D.	62	39
Beyer, Hans A.	174	57
Bialik, Michael H.	222	70
Bicknell, Frank B.	222	70
Bicknell, John N.	218	65
Biedlingmaier, G. J.	62	39
Bielawski, John G.	222	70
Bieri, Dixon L.	26	36
Bigley, Bernard	126	53
Bigman, Oscar	222	70
Bignall, C. Rexford	106	48
Bihl, John H.	222	70
Billingslea, Thos. H.	222	70
Biluk, Frank J.	126	53
Bing, Richard J.	222	70
Bingham, B. Wayne	90	43
Binning, Griffith	74	42
Binns, Philip M.	222	70
Birch, John R.	222	70
Birch, Larry H.	106	48
Birch, Wm. G.	102	46
Bird, Wm. L.	94	45
Birk, Robert E.	222	70
Birk, Wilbur R.	18	35
Birkam, Fred F.	222	70
Birkelo, Carl H.	174	57
Birkhill, F. Ross	222	70
Birmingham, D. J.	222	70
Birmingham, John R.	222	70
Birndorf, Leonard	222	70
Birzgalis, Alfreds A.	94	45
Bishai, Yousef, B.	126	53
Bishop, Don L.	62	39
Bishop, G. Clare	110	52
Bishop, Harry M.	190	62
Bishop, Ronald C.	218	65
Bissell, G. W.	222	70
Bitner, Leland M.	190	62
Bittker, Isadore I.	222	70
Bittrich, Norbert M.	222	70
Black, Chas. E.	90	43
Black, Charles E.	158	55
Black, Earl D.	222	70
Black, Gertrude C. K.	90	43
Black, Robert W.	222	70
Blackhurst, J. F.	154	55
Blackhurst, Robt. T.	154	55
Blaha, Vernon B.	150	55
Blain, Alexander, III	222	70
Blain, Donald G.	222	70
Blain, James H., Jr.	222	70
Blaine, Max	222	70
Blair, H. Milton	42	38
Blair, Larry	18	35
Blair, Thomas C.	90	43
Blair, Wm. F.	222	70
Blakeney, James R.	174	57
Blakey, Leonard C.	158	55
Blanchard, Gerald E.	174	57
Blanchard, Lowell E.	114	52
Blanchard, Russell S.	222	70
Blanden, Merwin R.	114	52
Blanks, Douglas H.	222	70
Blass, Norman H.	222	70
Blatt, Ronald W.	222	70
Blatter, Erwin W.	194	63
Bleier, Alfred	222	70
Bleil, Eugene E.	90	43
Bliesmer, August F.	26	36
Blinkhorn, David H.	222	70
Block, Duane, L.	222	70
Block, Melvin A.	222	70

Name	*County Code*	*Page*
Blocksma, Ralph	106	48
Blodgett, James B.	222	70
Blodgett, Wm. H.	222	70
Bloemendaal, Dirk C.	186	62
Bloemendal, W. B.	186	62
Blondy, Marshall J.	222	70
Bloom, Albert	222	70
Bloom, Arthur R.	222	70
Bloom, Robt. E.	162	56
Bloom, Victor	222	70
Bloomberg, Sanford	222	70
Blue, Jane	174	58
Bluhm, Gilbert B.	222	70
Blum, Benj. B.	170	57
Blum, George L.	222	70
Blumenthal, Frank S.	222	70
Blumenthal, Franz L.	222	70
Blumer, Abraham	222	70
Boblitt, Delbert E.	218	65
Boccaccio, John L.	222	70
Boccia, James J.	222	70
Bockrath, Henry M.	174	58
Boddie, Arthur W.	222	70
Bodmer, Harvey C.	102	46
Boehm, John D.	150	55
Boelkins, Richard C.	106	48
Boerman, Walter J.	106	48
Boersma, Donald	106	48
Boersma, Vernon L.	186	62
Boesky, Malcolm D.	174	58
Boet, John T.	106	48
Bogart, Leon M.	62	39
Bogucki, Chester J.	222	70
Bogue, Robt. E.	222	70
Bogusz, Ladislaus	222	70
Bohn, Z. Stephen	222	70
Bohne, A. Waite	222	70
Boileau, Thornton I.	174	58
Bolan, Ellis S. J.	70	42
Boland, John R.	222	70
Bolduc, Gregoire	62	39
Boldyreff, Ephraim B.	138	54
Boles, Murray	222	70
Boles, Roger	218	65
Boles, Wm. P.	62	39
Bolitho, Thos. B.	134	54
Bolstad, Donald S.	222	70
Bolter, Sidney	222	70
Bolthouse, Robt. E.	162	56
Bolton, Norman	222	70
Bolton, Russell P., Jr.	222	70
Boman, Robert H.	222	70
Bond, Wm. H.	162	56
Bond, Wm. W.	158	55
Bonifer, Paul P.	34	37
Bonifer, Philip P.	34	37
Bontrager, W. E.	150	55
Bonzelaar, Alvin	186	62
Bonzelaar, Marvin	106	48
Booher, Craig E.	106	48
Bookmyer, Robt. M.	174	58
Bookstein, Abraham M.	222	70
Bookstein, Joseph J.	218	65
Boon, A. Floyd	138	54
Boone, Cornelius E.	186	62
Boone, George F.	222	70
Booth, Earnest	222	70
Boothby, Carl F.	214	65
Boothby, Fredk. M.	214	65
Boothby, Paul	214	65
Bope, Wm. P.	214	65
Borchak, Robert G.	222	70
Borden, Chas. L.	194	63
Borden, Igor I.	222	70
Borin, Maurice C.	222	70
Bornstein, Sidney	222	70
Borocz, Istvan	218	65
Borrego, Jose M.	222	70
Boruch, Leon R.	110	52
Bosch, Jan K.	218	65
Bosker, Donald	62	39
Boswell, David E.	34	37
Bota, Robert A.	62	39
Botch, Edmund S.	218	65
Botsford, James H.	218	65
Bott, Edmund T.	222	70
Botting, A. J.	106	48
Bottomley, Thos. H., Jr.	194	63
Botvinick, Isadore	222	70
Boucher, Roman E.	174	58
Boughner, Walter H.	194	63
Bourne, Charles W.	218	65
Boutros, Nabil R.	222	70
Boutrous, Thos. A.	222	70
Bovee, Marion E.	194	63
Bow, William A.	190	62
Bowden, Wm. S.	194	63
Bower, Allen B.	126	53
Bower, Donald W.	222	70
Bower, Richard J.	102	46
Bowers, Chas. L.	174	58
Bowers, Leo J.	222	70
Bowersox, Leroy W.	222	70
Bowlby, James R.	222	70
Bowman, David A.	22	36
Bowman, Harold E.	106	48
Bownes, Eugene A.	222	70
Bowsher, Robt. E.	154	55
Boyajian, Albert	222	70
Boyce, Charles R.	222	70
Boyce, David C.	106	48
Boyce, Donald H.	50	39
Boyce, George H.	54	39
Boyce, George H., Jr.	54	39
Boyd, Albert L.	222	70
Boyd, De Vere R.	162	56
Boyd, Jack L.	162	56
Boyd, James W.	114	52
Boyd, John H.	222	70
Boyd, Wayne R.	214	65
Boyer, Peter R.	62	39
Boyle, Albert J.	222	70
Boyle, Eugene H.	222	70
Boyle, Robert E.	26	36
Bozdech, Jiri Josef	22	36
Brace, Fredk. C.	106	48
Brachman, A. Peter, Jr.	10	35
Bracken, Andrew H.	222	70
Braden, Robert G.	222	70
Bradfield, Horace F.	222	70
Bradfield, R. John	218	65
Bradford, Carl W.	90	43
Bradley, D. E.	198	64
Bradley, Geo. T.	222	70
Bradley, Robt. M.	62	39
Bradshaw, Park S.	162	56
Brady, Neal C.	174	58
Braham, Wilbur G.	198	64
Brain, Roy G.	62	39
Braley, Wm. N.	222	70
Bramick, Fritz W.	222	70
Branch, Hira E.	62	39
Brand, Benj.	222	70
Brandl, Earl A.	218	65
Brandt, Ralph L.	218	65
Brantley, Robt. E.	174	58
Brashares, Zane A.	98	45
Brasie, Donald R.	62	39
Bratt, Harvey J.	106	48
Braun, Lionel	222	70
Braun, Robert A.	222	70
Braunschneider, Geo. E.	106	48
Braverman, Morris M.	222	70
Breakey, Barry A.	218	65
Breakey, Robt. S.	90	43
Bredau, Frank N., Jr.	222	70
Breiner, Sander J.	222	70
Brekke, Viola G.	222	70
Bremer, John P.	222	70
Bremer, Wm. M.	222	70
Brender, Friedrich P.	190	62
Breneman, Gerald M.	222	70
Breneman, James C.	102	46
Brennan, Louis G.	222	70
Brennan, Michael J.	222	70
Brenner, E. J.	74	42
Brenner, Frederick	22	36
Brent, Morris S.	222	70
Bresnahan, Boyd K.	222	70
Brewer, Wilson K.	218	65
Brey, Norman W.	222	70
Brickman, Murray	222	70
Bridge, Ezra V.	194	63
Bridge, Robt. G.	154	55
Briegel, Walter A.	222	70
Briere, Russell O.	218	65
Briggs, Gordon	190	62
Briggs, Guy D.	62	39
Briggs, James	90	43
Briggs, Wm. J.	222	70
Bringard, Elmer L.	222	70
Brink, J. Russell	106	48
Brink, John W.	26	36
Brinkman, G. L.	222	70
Brinkman, Harvey H.	22	36
Briski, Jacob E.	222	70
Brisson, John E.	222	70
Brisson, Jos. C.	222	70
Bristol, Wm. R.	222	70
Britt, Eugene M.	218	65
Broadman, Sylvan A.	222	70
Brock, Donald R.	222	70
Broderson, Harvey S.	222	70
Brody, Gerald L.	218	65
Bromme, Wm.	222	70
Bronfenbrenner, Jack	26	36
Bronson, Wm. W.	174	58
Brooks, Chas. W., II	222	70
Brooks, Eugene M.	222	70
Brooks, Nathan	222	70
Brosius, Chas. O.	222	70
Brosius, Wm. L.	222	71
Brothers, Paul L.	198	64
Brovins, Walter G.	218	65
Browell, J. N., Jr.	222	71
Brown, Andrew G.	222	71
Brown, Arnold L.	174	58
Brown, Audrey O.	222	71
Brown, Byron P.	58	39
Brown, Carlton F.	222	71
Brown, Chas. H.	222	71
Brown, Clarence A.	62	39
Brown, Donald	222	71
Brown, Donald C.	14	35
Brown, Eli M.	222	71
Brown, Frances	222	71
Brown, Fredk. W., Jr.	90	43
Brown, Geo. M.	22	36
Brown, Gordon T.	222	71
Brown, Irmel W.	102	46
Brown, Jack A.	18	35
Brown, John R.	222	71
Brown, Joseph C.	90	43
Brown, Kenneth A.	222	71
Brown, Leland C.	126	53
Brown, Lewis F.	10	35
Brown, Oscar A.	222	71
Brown, Philip N.	218	65
Brown, Richard C.	206	64
Brown, Richard J.	206	64
Brown, Robt. A.	222	71
Brown, Robt. W.	34	37
Brown, Saml. M.	222	71
Brown, Saul	222	71
Brown, Stanley H.	222	71
Brown, Thos. A.	222	71
Brown, Wm. E., III	218	65

Name	*County Code*	*Page*
Browne, Richard T.	174	58
Brownell, Harold H.	222	71
Brownell, Paul G.	222	71
Brownson, Kneale M.	70	42
Brubaker, Earl W.	90	43
Bruce, Thomas A.	222	71
Bruder, Robt. C.	222	71
Brue, Peter P.	102	46
Bruer, Edgar S.	222	71
Bruer, Edwin L.	222	71
Bruggema, Jacob	142	54
Bruggers, Laurence	190	62
Brukardt, Herman R.	146	55
Bruni, John R.	26	36
Brunson, Allen E.	198	64
Brush, Brock, E.	222	71
Brush, Howard O.	194	63
Bruton, Martin F.	222	71
Bryan, Donald I.	222	71
Bryan, George C.	218	65
Bryan, Henry G.	174	58
Bryan, John B.	174	58
Bryant, Donald R.	62	39
Bryant, F. W.	174	58
Bryant, H. C.	218	65
Bryce, James W.	126	53
Bucalo, Harry D., Jr.	218	65
Buchanan, Gerald S.	62	39
Buchanan, Robert A.	218	65
Buchanan, Wm. F.	62	39
Buck, Jack H.	94	45
Buck, Raymond E.	222	71
Budd, Alexander S. Z.	174	58
Budden, M. Arthur	90	43
Budge, Melvin J.	74	42
Buechle, George T.	190	62
Buehrig, Robert	174	58
Buell, John H.	222	71
Buell, Martin F.	34	37
Buerki, Robin C.	222	71
Bujard, Robert S.	134	54
Bull, Frank L.	106	48
Bull, R. John	106	48
Bullard, R. W., Jr.	174	58
Bullen, Guy R.	98	45
Buller, Harry L.	222	71
Bullington, Bert M.	190	62
Bulmer, Dan J.	154	55
Bultema, James H.	162	56
Bulthuis, Jerry E.	186	62
Bunce, Leo W.	94	45
Bunting, John W.	14	35
Bunto, William G.	174	58
Burch, Larry T.	114	52
Burdick, Harry W.	102	46
Burge, Robert H.	222	71
Burge, Terry E.	90	43
Burger, John H.	174	58
Burgess, Bruno	174	58
Burhans, John B.	106	48
Burke, Chauncey G.	174	58
Burke, Colman J.	194	63
Burke, Dennis R.	218	65
Burke, James M.	30	37
Burke, Ralph M.	222	71
Burkett, Leslie V.	62	39
Burkholder, Harry J.	14	35
Burleson, John S.	106	48
Burling, Wesley M.	106	48
Burnett, Quinter M.	190	62
Burnham, Thomas K.	222	71
Burns, Dean C.	170	57
Burns, Robert E.	222	71
Burns, Robt. T.	222	71
Burnside, Howard B.	222	71
Burnstine, David	222	71
Burnstine, Julius Y.	222	71
Burnstine, Perry P.	222	71
Burr, Geo. C.	222	71
Burrell, Robt. B.	102	46
Burroughs, F. M., Jr.	106	48
Burroughs, John J.	158	55
Burroughs, Roswell G.	222	71
Burrows, Howard A.	222	71
Burstein, Harry S.	222	71
Burstein, I. Marvin	222	71
Burstein, Morris M.	222	71
Burt, Loren G.	74	42
Burton, De Witt T.	222	71
Burton, Irving F.	222	71
Burton, John F.	222	71
Burton, Robert D.	106	48
Burton, Wm. D.	218	65
Busard, J. Max	162	56
Busard, Thos. R.	162	56
Busch, Frank J.	190	62
Bush, Glendon J.	222	71
Bush, Jack L.	218	65
Bush, Raymond C.	154	55
Bushong, Benj. B.	70	42
Buskirk, Maurice D.	154	55
Buslepp, Robert C.	98	45
Butler, Gerald E.	218	65
Butler, James E.	222	71
Butler, John D.	222	71
Butler, J. Payne	222	71
Butler, Lawrence H.	222	71
Butler, Milton G.	190	62
Butler, Richard G.	222	71
Butler, Vernon C.	58	39
Butler, Volney N.	222	71
Butler, Wm. J.	106	48
Butler, Wm. J.	102	46
Buttrum, Edward J.	222	71
Buzzard, Walter D.	206	64
Byberg, Robt. A.	174	58
Byerrum, Richard U.	90	43
Byrd, Mary L.	106	48
Cabral, Hector H.	222	71
Cabrera, Enrique	222	71
Cabrera, Wm. P.	174	58
Cadger, Ralph E.	222	71
Cadieux, Hale, W.	26	36
Cady, Donald J.	190	62
Cady, Fredk. J., Jr.	190	62
Cady, Fredk. J.	190	62
Cahalan, Jos. L.	222	71
Cain, Waldo L.	222	71
Cairns, Donald A.	90	43
Cajigas, Tomas R.	22	36
Caldwell, George L.	222	71
Caldwell, John R.	222	71
Calhoun, Ethel T.	174	58
Callaghan, Regis L.	222	71
Callander, C. Glen	102	46
Calmidis, Yani V.	222	71
Calomeni, Anthony D.	90	43
Cambridge, Vernal W.	190	62
Cameron, Allan K.	190	62
Cameron, Arthur H.	222	71
Cameron, Duncan A.	222	71
Cameron, George H.	218	65
Cameron, Hugh A.	218	65
Cameron, Richard R.	206	64
Camp, Donald C.	26	36
Campbell, Alice F.	34	37
Campbell, Darrell A.	218	65
Campbell, Donald A.	22	36
Campbell, Duncan	222	71
Campbell, Fredk. W., Jr.	222	71
Campbell, Harvey E.	222	71
Campbell, Jack S.	34	37
Campbell, John S.	22	36
Campbell, K. N.	174	58
Campbell, Lloyd A.	190	62
Campbell, Malcolm D.	222	71
Campbell, Malcolm D.	174	58
Campbell, Mary B.	222	71
Campbell, Richard E.	94	45
Campbell, Richard J.	34	37
Campbell, Robt. E.	222	71
Campbell, Ruth B.	222	71
Campbell, Thelma W.	222	71
Campbell, Thomas D.	70	42
Camps, Enrique	222	71
Can, Atila N.	222	71
Canada, Donald R.	62	39
Cancino-Samson, E.	222	71
Candler, Clarence L.	222	71
Cannon, John P.	226	68
Cantor, Herbert C.	222	71
Cantor, Meyer O.	222	71
Cantow, Lawrence A.	222	71
Cantwell, John D.	194	63
Capellari, Elmer E.	222	71
Capili, A. M.	218	65
Capps, Samuel C.	106	48
Capron, M. J.	34	37
Caputo, Jos. M.	222	71
Caputo, Nancy T.	222	71
Capuzzi, Eugene T.	222	71
Caraway, James E.	222	71
Carbeck, Robt. B.	218	65
Carbone, Louis	222	71
Carbonell, Tomas	222	71
Cardinal, Thos. H.	226	68
Carefoot, Leonard	134	54
Carioni, Juan C.	174	58
Carlisle, John C.	222	71
Carlisle, Jos. D.	174	58
Carlson, Barbara F.	174	58
Carlson, Harold W.	222	71
Carlson, James C.	162	56
Carlson, Ralph E.	54	39
Carlson, Ralph G.	90	43
Carman, Kenneth W.	222	71
Carnes, Harry E.	222	71
Carney, John R.	138	54
Carney, Ruth V. C.	138	54
Carothers, Danl. J.	58	39
Carp, Jos.	222	71
Carpenter, C. J.	222	71
Carpenter, Glenn B.	222	71
Carpenter, Glenn B., Jr.	174	58
Carpenter, L. C.	106	48
Carpenter, Wm. S.	222	71
Carr, Earl I.	90	43
Carr, Edward A.	218	65
Carr, James G.	222	71
Carrick, Lee	222	71
Carrie, Robt. G.	194	63
Carroll, Catherine	218	65
Carroll, Elmer H.	222	71
Carroll, Jerome G.	222	71
Carroll, Lona B.	222	71
Carron, Dean P.	218	65
Carrow, Joyce M.	174	58
Carruthers, W. B.	126	53
Carson, Herman J.	222	71
Carstens, Henry R.	222	71
Carter, E. R.	102	46
Carter, John H.	26	36
Carter, John M.	222	71
Carter, Leland F.	222	71
Carter, Thomas L.	218	65
Cartwright, Wm. H.	70	42
Cartland, Geo. F.	102	46
Caruso, Joseph A.	90	43
Case, Hilda B.	222	71
Casey, Byron L.	90	43
Cash, Morton B.	222	71
Cash, Ralph	222	71
Cashen, Russell M.	102	46
Casler, Wilbur L.	134	54

Name	County Code	Page
Cassan, Stanley M.	62	39
Cassel, Harry E.	222	71
Cassidy, James T.	218	65
Castedo, Nicanor F.	174	58
Castellani, Rudolph J.	138	54
Castle, Maurice E.	222	71
Castleman, Douglas H.	18	35
Catalano, Joseph V.	222	71
Cate, James R.	106	48
Caughey, Andrew F., Jr.	222	71
Caughey, Edgar H.	222	71
Caukin, Howard S.	106	48
Caumartin, Fred E.	222	71
Caumartin, Hugh T.	190	62
Caviness, L. Harold	34	37
Cawthorne, Harold J.	26	36
Cayce, Wm.	106	48
Cecconi, R. D.	54	39
Cefai, Anthony F.	174	58
Cellar, Frank A., Jr.	222	71
Celori, Luciano	134	54
Ceravolo, Albert J.	222	71
Ceresko, Anthony R.	222	71
Cerkez, C. T.	174	58
Cerny, Joseph C.	218	65
Cetnar, Eugene J.	222	71
Chabator, George	126	53
Chafty, Mahmoud	194	63
Chajes, Richard	222	71
Chalat, Ned I.	222	71
Chall, Henry G.	222	71
Chamberlain, Ray W.	74	42
Chambers, Myrton S.	62	39
Chamichian, Souren L.	74	42
Chamness, James K.	186	62
Champion, John P.	106	48
Chandler, Donald	106	48
Chandler, Douglas	174	58
Chandler, Edward M.	34	37
Chandler, Jos. H.	174	58
Chapin, Fredk. J.	22	36
Chapin, Maurice H.	210	64
Chapin, Sidney E.	222	71
Chapin, Wm. S.	162	56
Chapman, Aaron L.	222	71
Chapman, Paul T.	222	71
Chapman, Roland H.	222	71
Chapnick, Henry A.	222	71
Chapper, Barbara M.	222	71
Charbeneau, Harold P.	126	53
Charbonier, Luis M.	126	53
Chardoul, Eugene N.	62	39
Charnas, Sidney	222	71
Charnley, Arnold D.	222	71
Chase, Clyde H.	222	71
Chase, Robert J.	106	48
Chase, Walter E.	10	35
Chase, Wm. D.	62	39
Chaskes, Marian I. G.	90	43
Chason, Jacob L.	222	71
Chatas, George J.	218	65
Chavis, William M.	222	71
Check, Frank E.	222	71
Chen, Allen S. Y.	222	71
Chen, Calvin	222	71
Chen, Mey En	106	48
Chen, Shek C.	222	71
Chen, Vincent V.	222	71
Cheney, Wm. D.	90	43
Cheng, James T.	174	58
Cherenzia, B. J.	222	71
Cherup, Nicholas	174	58
Chesky, Robert H.	222	71
Chesluk, Herman M.	222	71
Chester, Alice	222	71
Chester, Wm. P.	222	71
Chi, Seong H.	90	43
Chiasson, Antonio	162	56
Chickering, Wm. A.	26	36
Child, Chas. C., III	218	65
Childers, Merle A.	174	58
Childs, Geo. M.	222	71
Chipman, Elwood M.	206	64
Chipman, Willard A.	222	71
Chipoco, Adolfo M.	222	71
Chisa, Neldagae	174	58
Chisena, Peter R.	190	62
Choate, Frances S.	190	62
Chodorkoff, Bernard	222	71
Chodos, Dale D. J.	102	46
Chown, Marion C.	222	72
Chrest, Clarence P.	102	46
Christensen, R. C.	222	72
Christensen, Willis L.	174	58
Christian, Daniel K.	102	46
Christie, Joseph	170	57
Christopher, James C.	222	72
Christopher, Robt. P.	218	65
Christophersen, J. W.	162	56
Chrouch, Laurence A.	222	72
Church, Aloysius S.	222	72
Churchill, John A.	222	72
Chynoweth, Wm. R.	34	37
Cigany, Zoltan B.	158	55
Cilella, S. G.	26	36
Cioffari, Mario S.	222	72
Cipparone, Joseph R.	90	43
Ciprian, Jos. E.	222	72
Clague, Allan C.	218	65
Clahassey, Erwin G.	106	48
Clair, Alvin H.	174	58
Clapp, Henry W.	162	56
Clapper, Muir	222	72
Clark, Arthur M.	222	72
Clark, Bruce	158	55
Clark, Clarence M.	222	72
Clark, Gaius D.	90	43
Clark, Harold E.	222	72
Clark, Harry L.	138	54
Clark, James I.	10	35
Clark, Max D.	222	72
Clark, Melvin	90	43
Clark, Nelson H.	186	62
Clark, Oswald V.	70	42
Clark, Robt. L.	62	39
Clark, Wm. E.	90	43
Clark, Wm. P.	222	72
Clarke, Chas. N.	222	72
Clarke, C. Stanton	98	45
Clarke, Harriet A.	174	58
Clarke, Niles A.	118	52
Clarke, Norman E.	222	72
Clarke, Norman E., Jr.	222	72
Clarke, Robt. B.	222	72
Clary, Rudolph I.	38	38
Clausen, Claire H.	42	38
Clawson, Carroll K.	106	48
Claxton, Wilbert T.	114	52
Clay, Joel W.	126	53
Claytor, Archer A.	190	62
Claytor, Robt. W.	106	48
Cleland, Wm. D., Jr.	194	63
Clemens, Raymond R.	222	72
Clement, F. L.	102	46
Clermont, Volna	222	72
Clifford, James D.	162	56
Clifford, John E.	222	72
Clifford, Mary Ellen	218	65
Clifford, Robt. P.	194	63
Clifford, Robert	206	64
Clifford, Thos. P.	222	72
Climie, Andrew R. W.	222	72
Cline, Alan L.	174	58
Cline, J. Daniel	154	55
Cline, Richard S.	222	72
Cline, Theodore N.	70	42
Cline, Warren W.	70	42
Clinton, Geo. R.	90	43
Clippert, C. C.	150	55
Clodfelder, R. Paul	106	48
Clore, Forrest C.	90	43
Closz, Harold F.	162	56
Clowater, R. A.	162	56
Clune, John P.	222	72
Clyde, Ensign E.	218	65
Clyne, Benj. C.	194	63
Coak, Richard D.	114	52
Coakes, Jack E.	34	37
Coates, Carl A.	30	37
Coates, E. Osborne, Jr.	222	72
Cobane, John H.	222	72
Cobb, Thos H.	174	58
Cochrane, Edgar G.	222	72
Cocorelis, S. G.	222	72
Cohan, Bruce E.	218	65
Cohen, Alan	126	53
Cohen, Alberto	126	53
Cohen, Herbert H.	222	72
Cohen, Jack J.	174	58
Cohen, Lewis	174	58
Cohen, Melvin F.	222	72
Cohn, Danl. E.	222	72
Cohn, Stuart L.	14	35
Cohn, S. Leonard	222	72
Cohoe, Don A.	222	72
Colah, Sorab A.	126	53
Cole, Gerald G.	62	39
Cole, James E.	222	72
Cole, Versa V.	210	64
Cole, Wyman C. C.	222	72
Cole, Wyman C. C., Jr.	222	72
Coleman, John F.	70	42
Coleman, Margarete W.	222	72
Coleman, Peter F.	222	72
Coleman, Wm. G.	222	72
Coles, Thomas B., Jr.	222	72
Collie, Ross J.	194	63
Collier, Beverly A.	222	72
Collier, Richard L.	222	72
Colligan, Joseph	26	36
Collings, M. Raymond	222	72
Collins, Edward F.	174	58
Collins, James E.	222	72
Collins, James I.	62	39
Collins, James W.	222	72
Collon, David	126	53
Colombo, John	126	53
Colon Bonet, Cesar H.	106	48
Colquhoun, Graham F.	34	37
Colvin, Leslie T.	222	72
Colwell, Clifford W.	62	39
Colyer, Raymond G.	222	72
Combs, Julius V.	222	72
Combs, Robt. G.	90	43
Comly, Hunter H.	222	72
Compton, Wm. A., Jr.	222	72
Comstock, Howard C.	90	43
Comstock, Lawrence A.	222	72
Comstock, L. David	38	38
Conaway, Chas. E.	110	52
Condon, Frank J.	174	58
Conklin, Emma J.	222	72
Conley, Donal T.	134	54
Conley, Lowry C. M.	222	72
Conn, Jerome W.	218	65
Connaughton, P. J.	170	57
Connelly, Richard C.	222	72
Conner, Edward D.	174	58
Connolly, Paul J.	222	72
Connors, John J.	222	72
Conover, Geo. V.	62	39
Conover, McClellan B.	62	39
Conrad, Maynard M.	102	46
Considine, Basil, Jr.	222	72
Constantine, Aeneas	14	35
Conti, Jos. B.	170	57
Conway, Jos.	26	36

Name	*County Code*	*Page*
Conway, Wm. S.	170	57
Conybeare, Robt. C.	26	36
Cook, Bruno C.	46	38
Cook, Carl S.	186	62
Cook, Carla A.	222	72
Cook, Carlton L.	114	52
Cook, Frank W.	62	40
Cook, Henry	62	40
Cook, Hugh K.	22	36
Cook, James A.	222	72
Cook, James C.	222	72
Cook, John L.	62	40
Cook, J. Maxwell	90	43
Cook, Raymond R.	22	36
Cooke, Weldon	26	36
Cookingham, Cory E.	62	40
Cookinham, Frank	222	72
Cooksey, Norton J.	174	58
Cooksey, Warren B.	222	72
Cooley, Chas. W.	98	45
Cooley, Randall M.	98	45
Cooley, Roy V.	174	58
Cooper, Chas. A.	54	39
Cooper, Edmond L.	174	58
Cooper, James B.	222	72
Cooper, James C.	22	36
Cooper, Jos. E.	214	65
Cooper, Paul F.	102	46
Cooper, Ralph R.	222	72
Cooper, Richard F.	222	72
Cooper, Robert S.	174	58
Cooper, Wm. L.	26	36
Cooperstock, Moses	134	54
Cope, Henry E.	90	43
Corbeille, Catherine	222	72
Corbett, David P.	222	72
Corbett, John	126	53
Corbus, Burton R.	106	48
Corcoran, Wm. A.	134	54
Cordes, Jerome F.	90	43
Coriasso, Louis B.	62	40
Corley, Cecil	98	45
Corley, Ennis H.	98	45
Corley, Robt. W.	98	45
Corneliuson, G. B.	90	43
Cornell, Homer E.	162	56
Cornish, F. L., III	102	46
Corrigan, K. E.	174	58
Corssen, Gunter	218	65
Cortez, Joseph A.	222	72
Cortopassi, Vital E.	190	62
Cory, Chas. W.	190	62
Cosens, Stanley A.	22	36
Cosio, Jose	126	53
Coskey, Ralph J.	174	58
Costello, Russell T.	222	72
Costello, Stephen D.	222	72
Cotant, John F.	222	72
Cotton, Schuyler O.	222	72
Coucke, Henry O.	174	58
Coulter, Keith D.	150	55
Coulter, Wm. J.	42	38
Counts, Robert W.	174	58
Courtney, Kenneth O.	218	65
Courtney, N. Warn	218	65
Courtney, Rufus S.	126	53
Courville, Chas. J.	222	72
Coury, John J., Jr.	194	63
Cowan, John A.	90	43
Cowan, Wilfrid	222	72
Cowen, Leon B.	222	72
Cowen, Robt. L.	222	72
Cox, Ferdinand	98	45
Cox, Frank, Jr.	222	72
Cox, Franklin H.	102	46
Coyle, James E.	222	72
Coyne, Kenneth M.	62	40
Craig, Roy D.	222	72
Craig, Roy E.	222	72
Craig, William G.	62	40
Cram, Ralph A.	34	37
Crandell, Clare H.	150	55
Crane, Harold D.	106	48
Crawford, John W.	162	56
Crawford, Kenneth L.	102	46
Crawford, Robert I.	222	72
Crawley, Eugene H.	222	72
Crawley, Kenneth R.	102	46
Craymer, Austin	138	54
Creager, Ray O.	102	46
Cremer, John A.	106	48
Cresswell, T. A.	190	62
Cretens, Mary	50	39
Cretsinger, Francis C.	102	46
Crews, Thos. H.	222	72
Cripps, James R.	202	64
Crissey, Robt. R.	22	36
Crissman, Richard K.	106	48
Criswell, Robt. H.	22	36
Croasdale, R. E.	102	46
Crockett, E. E. J.	222	72
Croll, Leo J.	222	72
Croll, Maurice	222	72
Croman, Jos. M., Jr.	126	53
Cronick, Anne B.	162	56
Crook, Chas. L.	222	72
Crook, Clarence E.	218	65
Cross, Harold E.	222	72
Cross, Robert L.	62	40
Cross, Thomas N.	218	65
Crossen, Robt. J.	222	72
Croushore, James E.	222	72
Crow, Harold E.	90	43
Crowell, Richard C.	26	36
Crum, Roger E.	174	58
Cserhalmi, Maria V.	222	72
Csonka, Nicholas	22	36
Cubberley, Robt. B.	222	72
Cudney, Ethan B.	174	58
Cueto, Jose M.	222	72
Cullen, George	190	62
Cullis, Frank	222	72
Culver, Dean T.	30	37
Culver, Raymond E.	98	45
Cummings, Geo. D.	90	43
Cummings, Howard H.	218	65
Curatolo, Victor	126	53
Curhan, Jos. H.	222	72
Curran, Cyril J.	102	46
Currier, Richard K.	102	46
Curry, Geo. J.	62	40
Curry, Robt. K.	34	37
Curtis, Arthur C.	218	65
Curtis, Edward G.	218	65
Curtis, Frank E.	222	72
Curtis, Keith L.	58	39
Curtiss, Wm. P.	222	72
Curts, James H.	190	62
Cusick, Paul L.	222	72
Cutler, G. Campbell	62	40
Cutler, Wm. M.	174	58
Dahlgren, Carl W.	174	58
Dahlstrom, Doris E.	102	46
Daignault, M. F.	222	72
Dailey, Walter S.	26	36
Daitch, Harold J.	222	72
Daitch, Martin H.	222	72
Dale, Edward C.	90	43
Dale, Esther H.	222	72
Dale, Mark	222	72
Dales, Ernest W.	106	48
Dalgleish, Archie J.	26	36
Dal Santo, G.	222	72
Daly, Byrne M.	98	45
Daly, Eugene T.	222	72
Daly, Harold L., Jr.	34	37
Daly, Mary	34	37
Daly, Miriam S.	34	37
Damiano, Robert E.	102	46
Damm, John R.	62	40
Damstra, Donald L.	118	52
Dana, Robert L.	102	46
Danforth, James C., Jr.	222	72
Danforth, Robert D.	222	72
Davison, Wm. T.	194	63
Danielski, John J.	222	72
Danto, Bruce L.	222	72
Danz, George W.	222	72
Daoust, Patrick H.	222	72
Dardas, Michael J.	22	36
Darian, H. B.	126	53
Darling, Charles E.	222	72
Darling, C. G., Jr.	174	58
Darling, Lewis H.	90	43
Darnley, James D.	174	58
Dart, Dorothy O.	162	56
Dashiell, Grayson F.	222	72
Dasler, Adolph F.	162	56
Dassel, Paul M.	106	48
Daugharty, Robert V.	226	68
Davenport, Bruce	98	45
Davenport, Clyde P.	190	62
Davenport, Fred M.	218	66
Davey, Paula G.	218	66
Davey, Winthrop N.	218	66
Davidson, Donald L.	66	41
Davidson, Harold H.	222	72
Davidson, Harry O.	222	72
Davies, Thos. S.	222	72
Davies, Windsor S.	222	72
Davis, David B.	106	48
Davis, Don G.	90	43
Davis, Herbert A.	222	72
Davis, James H.	22	36
Davis, James M.	214	65
Davis, Jerome D.	222	72
Davis, Linford J.	178	61
Davis, Lionel L.	74	42
Davis, Robert C.	62	40
Davis, Roy A.	106	48
Davis, Thomas B.	106	48
Davis, William B.	78	42
Davison, Wm. T.	194	63
Dawe, C. D.	90	43
Dawson, Ralph E.	62	40
Dawson, Walter D.	106	48
Dawson, W. A.	222	72
Dawson, William A.	170	57
Day, A. Jackson	222	72
Day, Francis T.	222	72
Day, Jay C.	222	72
Day, Luther W.	78	42
Dayton, Richard C.	174	58
Deaenlle, Eliodoro	222	72
Deal, Harold R.	126	53
Dean, Alfred	106	48
Dean, Carleton R.	222	72
Dean, George A.	222	72
Deatrick, Richard W.	218	66
De Boer, Arthur F.	106	48
De Boer, Clarence J.	106	48
De Boer, Guy W.	106	48
De Busk, Roger W.	222	72
Decaires, Percy F. R.	218	66
Decker, J. C.	166	57
Decker, Wm. A.	102	46
Deering, Robert J.	222	72
De Giustino, Caesar	222	72
De Groat, Albert F.	222	72
Dehaan, Raymond M.	102	46
Dehlin, James R.	50	39
Deigert, Fredk A.	106	48
Deighton, Murray M.	174	58
Deitch, Daniel	222	72
De Jong, Russell N.	218	66

Name	*County Code*	*Page*
DeJonge, Bud R.	218	66
De Jongh, Edwin	222	72
Dekornfeld, Thom. J.	218	66
Dekryger, Maynard	166	57
Delaini, Stella M.	222	72
De Land, C. Le Roy	58	39
Delaney, Malcolm J.	174	58
De Lawrence, Betty J.	222	72
De Lawrence, Thomas	222	72
De Lawter, Hilbert H.	174	58
Delbert, Stewart G.	102	46
De Leeuw, Henry	162	56
Delevie, Jaap B.	174	58
Del Giorno, Thos. E.	222	72
Delgiudice, P. A.	222	72
Delnay, Richard M.	106	48
De Long, Robert E.	102	46
Delong, Wm. B.	218	66
Delvalle, Francisco	110	52
Del Valle, Mario	222	72
Delzingro, Nicholas	62	40
De Maago, Gerald	106	48
De May, Cuthbert E.	98	45
De May, John D.	98	45
Deming, Richard C.	98	45
De Mol, Richard J.	106	48
Demuth, George R.	218	66
Den Houter, Willard D.	218	66
Dennis, Melvin S.	222	72
Dennison, H. Eugene	106	48
Denson, Andrew L.	222	72
Deocampo, E.	126	53
Deocampo, Nestor D.	126	53
De Paulis, Dario C.	126	53
De Pree, Harold E.	102	46
De Pree, Isla G.	106	48
Deresz, Alphonse R.	222	72
Derifield, R. S.	190	62
Derleth, Paul E.	222	72
Derr, John W.	222	72
Derrick, C. F.	222	72
Derrick, C. Warren	102	46
Deryke, Gilbert R.	222	72
De Smyter, Geo. C.	222	72
De Spelder, Ray E.	222	72
De Tar, John S.	218	66
Dettman, Carlton K.	62	40
Dettman, Harold	198	64
Deuby, Owen J.	222	72
Deur, Theodore R.	166	57
Deutsch, Wm. L.	174	58
De Vel, Leon	106	48
Devine, Herbert W.	222	72
De Vito, H. Louis	174	58
Devlin, James A.	154	55
De Vries, Corydon F.	90	43
De Vries, Danl.	106	48
De Vries, Harold G.	186	62
Devries, John M.	102	46
De Vries, Peter J.	186	62
Dew, Robert R.	102	46
Dewane, Francis J.	146	55
Dewey, Kent A.	106	48
De Witt, Donald E.	186	62
De Witt, Norman L.	102	46
Dexter, Mary J. B.	90	43
De Young, Fredk. W.	186	62
De Young, Jess	166	57
DeYoung, Roland W.	162	56
De Young, William A.	190	62
Diakow, Lilian M.	222	72
Diamante, Paul J.	34	37
Diaz Perez, Rodrigo	218	66
Dibble, Harry F.	222	72
Diccion, R. A.	114	52
Dice, Nanette	106	48
Dick, Leo A.	102	46
Dick, Mark W.	106	48
Dickerson, Willard W.	210	64
Dickman, Harry M.	114	52
Dickson, Albert R.	34	37
Dickson, Basil R.	222	72
Dickson, Elias L., Jr.	222	72
Dickson, Laurie C., Jr.	222	72
Dickson, Leon A.	222	72
Dickson, Mary D.	222	72
Dickstein, Bernard	62	40
Didelius, Donald P.	218	66
Diebel, Nelson W.	222	72
Diehl, George Z.	158	55
Diekman, Fred C.	222	72
Diephuis, Bert	214	65
Dieterich, Gordon C.	218	66
Dietze, Margaret R.	222	72
Dietzel, Hugo O.	222	72
Diggs, Roy D.	62	40
Di Lella, Leonard L.	222	73
Dill, Hugh L.	222	73
Dill J. Lewis	222	73
Dillman, Richard S.	218	66
Dillon, Thos. J.	214	65
Di Loreto, Panfilo C.	222	73
Di Maso, Gennaro J.	222	73
Dimond, Geo. E.	222	73
Dingman, Reed O.	218	66
Dinnen, Wm. J., Jr.	194	63
Dionne, Paul E.	222	73
Dipiero, Ranicro	222	73
Diskey, Donald G.	106	48
Diskin, Frank	162	56
Dismond, Samuel R.	62	40
Dito, William R.	174	58
Dittmer, Edwin F.	222	73
Ditzler, John W.	222	73
Dixon, Fredk. W.	222	73
Dixon, Ralph C.	86	43
Dixon, Ray S.	222	73
Dixon, Willis L.	106	48
Dobski, Edwin J.	174	58
Docter, Luebert	106	48
Dodds, Fredk. E.	62	40
Dodds, John C.	222	73
Dodds, Max E.	62	40
Dodenhoff, Chas. F.	222	73
Dodge, Warren M.	34	37
Dodrill, Forest D.	222	73
Dodson, Vernon N.	218	66
Doering, Wendell R.	222	73
Doerr, Louis E., Jr.	174	58
Doezema, Edward R.	102	46
Doig, Victor F.	222	73
Dolan, Edward A.	222	73
Dolbee, Malcolm K.	22	36
Dolega, Stanley F.	222	73
Dolfin, Wilbur E.	218	66
Dolgoff Sidney	222	73
Dolin, Simon	222	73
Domino, Edward F.	218	66
Domzalski, Henry M.	222	73
Donahoe, Harold T.	210	64
Donath, Rolf W.	222	73
Donnelly, Wm. J.	174	58
Donovan, Eugene T.	222	73
Donovan, Richard S.	222	73
Dood, Arnold R.	186	62
Dooley, James F.	62	40
Dooley, William D.	174	58
Doolittle, John E.	26	36
Doorenbos, Harvey E.	106	48
Doorn, Henry A.	106	48
Doornbos, Fred A.	106	48
Dorain, Wallace B.	106	48
Doran, John H.	222	73
Dorland, Clarke	110	52
Dorman, Jack	222	73
Dorner, Kenneth R.	90	43
Dorostkar, Massoud	174	58
Dorostkar, M. G.	222	73
Dorsey, Edward C.	222	73
Dorsey, John M.	222	73
Dorsey, John M., Jr.	174	58
Dosch, Paul	150	55
Doty, Chester A.	222	73
Doty, James R.	110	52
Doub, Howard P.	222	73
Dougherty, Edw. A., Jr.	222	73
Douglas, Clair L.	222	73
Douglas, Dale W.	158	55
Douglas, Edward W.	98	45
Douglass, Robert C.	222	73
Douthat, Rudenz T.	218	66
Douvas, Nicholas G.	194	63
Dovitz, Benj. W.	222	73
Dowd, Bennard J.	102	46
Dowidat, Raymond W.	190	62
Downer, Ira G.	222	73
Downes, Geo. O.	222	73
Doyle, Fredk. M.	102	46
Doyle, John L.	106	48
Dragulescu, Paul	126	53
Drake, Ellet H.	222	73
Drake, Gerald	170	57
Drake, James J.	222	73
Dranginis, Edward J.	158	55
Drapiza, Ruth L.	222	73
Draves, Edward F.	222	73
Drazek, Jos. A.	222	73
Drew, Dale R.	174	58
Drewycr, Glenn E.	62	40
Driver, James R.	218	66
Drogowski, Edward J.	174	58
Drolett, Alfred J.	90	43
Drolett, Donald J.	90	43
Drolett, Lawrence A.	90	43
Drozdowska, Z. J. F.	222	73
Drumm, John K.	222	73
Drury, Chas. P.	134	54
Dryer, Clyde K.	218	66
D'Sena, Dorothy	222	73
Dubin, Jos. J.	222	73
Dubpernell, Martin S.	222	73
Dubpernell, Robert O.	222	73
Dudek, John J.	222	73
Dudzinski, Edmund J.	126	53
Duffin, Wallace B.	106	48
Duffy, Ray M.	118	52
Dugger, James A.	102	46
Duhamel, Peter A.	174	58
Dukay, Alexander P.	218	66
Dumke, Paul R.	222	73
Duncan, James R.	222	73
Dundas, Edward M., Jr.	222	73
Dundon, Arthur F.	70	42
Dunkel, John F.	90	43
Dunkin, Lloyd S.	94	45
Dunlap, Gregg L.	174	58
Dunlap, Henry A.	222	73
Dunlop, Donald	74	42
Dunn, Cornelius E.	222	73
Dunn, Forest M.	90	43
Dunn, Lewis E.	174	58
Dupler, Gerald E.	222	73
Dupuis, Jean Paul	194	63
Durak, Gerald G.	174	58
Durham, Everett W.	222	73
Durham, Robert	222	73
Durman, Donald C.	190	62
Durocher, Normand E.	174	58
Dustin, Richard E.	114	52
Dustin, Robert W.	174	58
Dutcher, Dwight J.	222	73
Duwe, Frank A.	222	73
Dwaihy, Paul J.	222	73
Dwyer, Francis W.	222	73
Dwyer, William F.	62	40
Dye, Robert A.	106	48
Dyer, H. Lorne	222	73

Name	*County Code*	*Page*
Dykema, Rosemary M.	222	73
Dykewicz, Richard A.	62	40
Dykhuizen, H. D.	162	56
Dykstra, Jerome H.	186	62
Dziuba, John F.	222	73
Dzul, Paul	222	73
Eades, Chas. C.	222	73
Eadie, Gordon A.	122	52
Eary, L. Edmond, Jr.	106	48
Easterly, Robert L.	222	73
Eaton, Crosby D.	222	73
Eaton, Robert M.	106	48
Eaton, Wayne L.	62	40
Ebner, Charles M.	126	53
Echt, Raymond J.	222	73
Eckhous, Arthur W.	222	73
Economy, Donald E.	222	73
Eddy, Howard R. C.	114	52
Eder, Saml. J.	222	73
Edgar, Irving I.	222	73
Edholm, Curtis D.	106	48
Edmonds, Gerald W.	222	73
Edmonds, Wm. N.	222	73
Edmonds, W. T.	70	42
Edmondson, Robert B.	222	73
Edmunds, Wm. P.	218	66
Edwards, C. Rupert L.	222	73
Edwards, James G.	222	73
Edwards, Melvin L., Jr.	218	66
Egan, Charles F.	222	73
Eggleston, Robert L.	106	48
Egli, Charles T.	106	48
Eichhorn, Ernest M.	62	40
Eickhorst, Thos. N.	62	40
Eidson, Hazel D.	26	36
Eisenbrey, Arthur B.	222	73
Eisenstein, B.	222	73
Eisman, Clarence H.	222	73
Ekelman, Seymour B.	126	53
Ekelund, Clifford T.	174	58
Ekinci, Mehmet	174	58
Elder, Edward E., Jr.	174	58
Eldersveld, Herman C.	106	48
Eldredge, Edward F.	222	73
Elghammer, Richard M.	26	36
Elie, Jean C.	222	73
Eliot, Johan W.	218	66
Ellias, Elmer P.	126	53
Elliott, Chas. S.	86	43
Elliott, Dean C.	170	57
Elliott, Hardie B., Jr.	62	40
Elliott, J. Colin	26	36
Elliott, Jos. P., Jr.	222	73
Elliott, Lyle D.	218	66
Elliott, Robert N.	222	73
Ellis, Bertha W.	90	43
Ellis, Chas. W.	90	43
Ellis, Claude I.	70	42
Ellis, Frank R.	222	73
Ellis, George A.	190	62
Ellis, Larry G.	86	43
Ellis, Michael E.	106	48
Ellis, Nicholas J.	162	56
Ellis, Ruth	154	55
Ellison, Alfred, Jr.	90	43
Elman, Meyer J.	222	73
Elmendorf, E. N., II	210	65
Elson, Abraham L.	222	73
Elton, Richard F.	222	73
Elvidge, Robert J.	222	73
Ely, Cecil W.	190	62
Elzinga, Eugene R.	134	54
Emerick, Robert W.	166	57
Emery, Clayton S.	26	36
Emery, Wm. K.	26	36
Emmert, Herman C.	222	73

Name	*County Code*	*Page*
Endean, Donald H.	186	62
Endler, Gerhard C.	222	73
Endress, Zachary F., Jr.	174	58
Enfroy, Henri L.	222	73
Engel, Earl H.	222	73
Engel, John B.	174	58
Engelke, Otto K.	218	66
Engelman, Raymond M.	62	40
Engels, John A.	126	53
English, John W.	134	54
Engstrom, Albert D.	162	56
Engstrom, Fredk. W.	222	73
Engstrom, Ruby M.	222	73
Eno, Laurel S.	222	73
Ensign, Dwight C.	222	73
Ensroth, Jack F.	174	58
Eppler, William R.	222	73
Epstein, Burton S.	222	73
Ergin, Nevit	62	40
Erhard, O. Stewart	58	39
Erickson, Eldon W.	222	73
Erickson, Miles A.	222	73
Ericsson, Arthur D.	222	73
Ericsson, Judith A.	222	73
Ericsson, Kermit C.	106	48
Erkfitz, Arthur W.	126	53
Erman, Jos. M.	222	73
Ermete, Sait D.	222	73
Ernst, Arthur R.	190	62
Ernest, Reginald H.	222	73
Escalera, Gustavo	194	63
Eschbach, Jos. W.	222	73
Esparza, Higinio S.	190	62
Capili, E. Esquejo	218	65
Esslinger, John O.	174	58
Ettinger, Ralph D.	62	40
Eurs, Frank J.	222	73
Evans, Gomer P., Jr.	222	73
Evans, Jos. M.	222	73
Evans, Matthies	90	43
Evans, Robert H.	198	64
Evans, Tommy N.	222	73
Everett, D. W.	10	35
Evseeff, Geo. S.	174	58
Ewing, Chas. H.	222	73
Ewing, R. L.	138	54
Ewing, Robert T.	158	55
Eyler, Wm. R.	222	73
Eyres, Alfred E.	222	73
Faber, Michael	26	36
Fabok, Ferenc	222	73
Fachnie, Harold L.	222	73
Faello, Sebastian J.	222	73
Fagan, James P.	222	73
Fagin, Irving D.	222	73
Fahim, Ramfis B.	222	73
Failing, John F., Jr.	62	40
Fairbanks, Stephen	34	37
Fajans, Stefan S.	218	66
Falbisaner, G. J.	106	48
Falick, Mordecai L.	222	73
Falk, Elwin C.	218	66
Falk, Ira E.	222	73
Fallis, Lawrence S.	222	73
Falls, Harold F.	218	66
Fan, Q. C.	62	40
Fandrich, Theodore S.	222	73
Farah, Ben S.	62	40
Farah, Jalil	174	58
Farber, Chas. E.	106	48
Farbman, Aaron A.	222	73
Fargher, Robert A.	174	58
Farhat, Maynard M.	62	40
Farhat, Saeed M.	218	66
Fargotstein, Ralph	222	73
Farina, Angel M.	222	73

Name	*County Code*	*Page*
Farley, Albert W.	190	62
Farmer, John C.	162	56
Farmer, Wm. L., Jr.	222	73
Farnam, Larry M., Jr.	222	73
Fath, August F.	102	46
Fattic, Grover R., Jr.	26	36
Fatum, Paul J.	106	48
Faunce, Sherman P.	222	73
Faust, Lawrence W.	106	48
Fayos, Juan V.	218	66
Fea, John F.	222	73
Fee, Manson G.	62	40
Feeheley, Robert D.	190	62
Feeley, Marshall J.	26	36
Feeney, James L.	114	52
Feeney, Kenneth J.	90	43
Feenstra, Laurence H.	106	48
Feigelson, Howard H.	222	73
Feld, David	222	73
Feldkamp, Lee E.	222	73
Feldman, Irwin	222	73
Feldman, Nathanial L.	222	73
Feldman, Paul H.	222	73
Feldstein, Martin Z.	222	73
Feller, Irving	218	66
Fellman, Sheldon L.	218	66
Fellner, Wm. A.	222	73
Fellows, Kenneth E.	106	48
Fellows, William R.	222	73
Fenech, Harold B.	222	74
Fenner, Wm. G.	222	74
Fennessey, John F.	222	74
Fenton, Edwin H.	194	63
Fenton, James L.	222	74
Fenton, Meryl M.	222	74
Fenton, Russell F.	222	74
Fenton, Stanley C.	222	74
Fentress, Vance	222	74
Ferazzi, Patrick S.	34	37
Ferguson, James A.	106	48
Ferguson, John T.	70	42
Ferguson, Robert	22	36
Ferguson, Robert K.	102	46
Feringa, Philip J.	222	74
Fernandez, Jose A.	62	40
Ferrand, Louis G.	106	48
Ferrara, Richard J.	222	74
Ferrara, Virginia M.	222	74
Ferrington, R. A.	218	66
Ferris, George N.	222	74
Ferris, James W.	62	40
Ferszt, Marion S.	222	74
Feurig, James S.	90	43
Fidler, Wm. F.	174	58
Fiebing, Jack A.	70	42
Fiegel, S. Albert	198	64
Field, E. Malcolm	190	62
Fields, Dozier N., Jr.	154	55
Figiel, Leo S.	222	74
Figiel, Steven J.	222	74
Filip, Hypolit K., Jr.	98	45
Filkin, Lawrence E.	222	74
Fill, Leon	222	74
Fillinger, Wells B.	46	38
Fillingham, Enid	162	56
Finch, Alvis D.	222	74
Finch, Donald E.	14	35
Finch, Duward L.	34	37
Finch, F. Sinclair	222	74
Finch, Jay S.	218	66
Finch, Stuart M.	218	66
Finck, Jerome H.	222	74
Fine, Edward	222	74
Fine, Gerald	222	74
Finger, John E.	190	62
Fink, Geo. C.	218	66
Fink, L. Jerome	174	58
Fink, Saml.	222	74
Finkell, Lawrence J.	174	58

Name	*County Code*	*Page*
Finkelstein, I. S.	222	74
Finkelstein, M. B.	222	74
Finkelstein, T.	62	40
Finlayson, Donald D.	42	38
Finn, James Wm.	126	53
Finnie, Gordon M.	18	35
Finnie, Raymond G.	18	35
Finton, Max A.	102	46
Finton, Robert E.	98	45
Firestone, N. S.	222	74
Firnsehild, Paul G.	222	74
Fischer, Arthur J.	222	74
Fischer, Fredk. J.	222	74
Fischer, Hans	22	36
Fischhoff, Jos.	222	74
Fischmann, George	218	66
Fishbaugh, Wm. F., Jr.	74	42
Fishbeck, William A.	70	42
Fishbein, Herbert L.	222	74
Fisher, Geo. S.	222	74
Fisher, James M.	222	74
Fisher, Jos. V.	218	66
Fisher, Robert E.	34	37
Fisher, Robert J.	218	66
Fishman, Gordon R. A.	174	58
Fitch, Donald N.	50	39
Fitch, Robert E.	62	40
Fitts, Ralph L.	106	48
Fitzgerald, C. H.	222	74
Fitzgerald, E. W., Jr.	194	63
Fitzgerald, Erwin L.	106	49
Fitzgerald, James M.	222	74
Fitzpatrick, F. J.	174	58
Fitzpatrick, F. W.	222	74
Fitzsimmons, Francis J.	102	46
Flaharty, Wm. J.	174	58
Flaherty, Henry J.	222	74
Flaherty, Norman W.	222	74
Flake, Thomas M.	222	74
Flanders, John P.	158	55
Fleischmann, Chas. B.	162	56
Fles, Robert J.	162	56
Fleschner, Thos. E.	190	62
Flett, Richard O.	210	65
Fleurquin, A. G.	174	58
Flick, John R.	174	58
Flintoff, Wm. M.	106	49
Flora, Wm. R.	222	74
Flores, R.	134	54
Flory, Clyde R., Jr.	90	43
Flower, James A.	222	74
Floyd, William S.	222	74
Flunt, Roman	102	46
Flynn, J. Donald	106	49
Fochtman, Thos. W.	106	49
Foerster, Alfred W.	206	64
Fogt, Herbert E.	222	74
Fogt, Robert G.	222	74
Foley, Arthur Lee, II	218	66
Foley, Hugh S.	222	74
Foley, Richard	14	35
Folkers, Leonard M.	90	43
Follis, Wm. M.	22	36
Folsom, John D.	162	56
Foo, Chas. T.	46	38
Foote, John A.	222	74
Fopeano, John V.	102	46
Forbes, John D.	218	66
Forbis, Orie L.	62	40
Ford, Frances A.	202	64
Ford, Geo. A.	222	74
Ford, Jack	218	66
Ford, Wm. J. A., Jr.	206	64
Fordell, Frank S.	222	74
Forgrave, Edward G.	222	74
Forney, Fred A.	150	55
Forrer, Gordon R.	222	74
Forrer, Graydon R.	62	40
Forster, Kenneth J.	190	62
Forsyth, Henry T.	206	64
Fortino, Silvio P.	90	43
Fortner, Roscoe J.	198	64
Foshee, J. Clinton	106	49
Fosmoe, Robert J.	102	46
Fosnaugh, Robert P.	222	74
Foster, Bradford S.	170	57
Foster, E. Bruce	222	74
Foster, Owen C.	222	74
Foster, Wallace M.	222	74
Fountain, Charles W.	222	74
Foust, Jos. C.	94	45
Fowler, Melvin E.	222	74
Fox, Ralph M.	174	58
Fox, Richard L.	70	42
Fox, William L.	14	35
Fox, Winslow G.	218	66
Foxworthy, John P.	106	49
Fraiberg, Paul L.	222	74
Fralick, F. Bruce	218	66
Frame, Boy	222	74
France, Chas. J.	222	74
Francis, Thos., Jr.	218	66
Franck, John R., Jr.	66	41
Frandsen, Philip H.	162	56
Franjac, Marion J.	222	74
Franke, Armin T.	194	63
Frankel, Maurice A.	222	74
Franklin, Benj. L.	142	54
Franklin, John E.	222	74
Fransway, Robert L.	218	66
Frantz, Charles H.	106	49
Franzen, Nils A.	222	74
Frary, Reginald A.	158	55
Fraser, Robert H.	34	37
Fraser, Robert J.	30	37
Frazer, Mary M.	222	74
Frederickson, Geo. C.	222	74
Free, Harry W.	222	74
Freedman, Arthur M.	222	74
Freedman, John	222	74
Freeman, Donald K.	222	74
Freeman, Mable	222	74
Freeman, Michael W.	222	74
Freeman, Wilmer	222	74
Freid, Saml.	222	74
Freier, Andrew A.	222	74
Freier, Morton L.	222	74
Freilich, Olga	222	74
Freitas, Eugene L.	222	74
Fremont, J. Courtney	222	74
French, Arthur B.	218	66
French, A. James	218	66
French, Lawrence W.	126	53
Freud, John W.	158	55
Frey, Charles F.	218	66
Frey, James L.	222	74
Fricke, David W.	106	49
Friedlaender, Alex S.	222	74
Friedlaender, Sidney	222	74
Friedlander, Joseph	222	74
Friedman, David	222	74
Friedman, Isidor H.	222	74
Friedman, Morris E.	26	36
Friedman, Seymour	222	74
Frieswyk, Melvin J.	186	62
Frohlich, Moses M.	218	66
Frost, Harold M.	222	74
Frost, Lyle W.	218	66
Frost, Richard G.	222	74
Fry, J. William	102	46
Frye, Carl M.	218	66
Frye, Sanders A.	170	57
Fryer, Douglas H.	90	43
Fryfogle, James D.	222	74
Fugate, E. M.	162	56
Fulgenzi, Andrew A.	126	53
Fulgenzi, William R.	222	74
Fuller, Edson H.	106	49
Fuller, Harvey T.	62	40
Fuller, Hugh M.	222	74
Fuller, Paul M.	102	46
Fuller, Raymond E.	106	49
Fuller, Wm. J.	106	49
Fulmer, Roger C.	70	42
Fulton, Harold E., Jr.	194	63
Fulton, Wm. J.	222	74
Funk, L. D.	34	37
Furlong, Harold A.	174	58
Furstenberg, A. C.	218	66
Fushman, John A.	174	58
Futterer, Le Roy A.	130	54
Fyvie, James H.	50	39
Gaba, Howard B.	174	58
Gaber, Ben	174	58
Gabrielsen, T. O.	218	66
Gadbaw, Jos. J.	174	58
Gaensbauer, F.	174	58
Gaffney, J. Mitchell	222	74
Gage, David P.	90	43
Gagliardi, Carl A.	222	74
Gagliardi, R. A.	174	58
Gahagan, Thomas	222	74
Gaikema, Everett W.	162	56
Gajewski, John E.	222	74
Galacz, Robert J.	222	74
Galantowiez, Henry C.	222	74
Galantowicz, Thos. H.	222	74
Galdonyi, Laslo	222	74
Galens, Gilbert J.	174	58
Galerneau, Darrel B.	222	74
Gall, Henry	222	74
Gallagher, James P.	222	74
Gallant, Vincent J.	222	74
Galles, James O.	26	36
Galliani, M.	114	52
Gallo, Bela	66	41
Galpin, Richard R.	174	58
Galsterer, Edwin C.	190	62
Galvin, Paul P.	222	74
Gamble, Kenneth	114	52
Gamble, Robert N.	218	66
Gamble, Wm. G., Jr.	22	36
Gamm, Kenneth E.	106	49
Gamon, Adam E., II	190	62
Gano, Avison	214	65
Ganos, Thomas	222	74
Gans, Robert I.	222	74
Ganschow, John H.	222	74
Garber, Frank W., Jr.	162	56
Garber, Frank W.	162	56
Garber, Max J.	174	58
Gardner, Carl A.	102	46
Gardner, Joe H.	190	62
Gardner, Lawrence W.	222	74
Gardner, Max L.	222	74
Gariepy, Bernard F.	174	58
Gariepy, Louis B.	222	74
Gariepy, Louis J.	222	74
Garland, Donald M.	174	58
Garlinghouse, A John, Jr.	90	43
Garlock, Fred C.	58	39
Garneau, Robert R.	130	54
Garrett, Evan L.	26	36
Garrett, Neil	222	74
Garrison, D. Eugene	218	66
Garrison, Robert E., Jr.	162	56
Garwacki, Dennis J.	222	74
Gascoigne, Richard H.	114	52
Gass, H. Harvey	222	74
Gaston, Herbert B.	222	74
Gates, Edward M.	174	58
Gates, George A.	218	66
Gates, Joann M.	174	58
Gates, Jon H.	78	42

Name	County Code	Page
Gates, Nathaniel	222	74
Gatley, Cleo R.	174	58
Gatley, Leslie W.	174	58
Gause, Richard C.	174	58
Gay, Harold H.	154	55
Gayles, Carlos B.	174	58
Gaynor, Alex	222	74
Geerlings, Lambert J.	166	57
Gehman, J. R.	22	36
Gehring, Harold W.	222	74
Gehringer, Norman F.	174	58
Gehrke, August E.	222	74
Geib, Ledru O.	222	74
Geib, Ormond D.	30	37
Geib, Oscar P.	94	45
Geis, Arthur F.	102	46
Geist, Edgar J., Jr.	174	58
Geitz, Wm. A.	222	74
Gelbach, Philip D.	222	74
Gelenger, Stephen M.	62	40
Gell, James W.	174	58
Gellar, Abraham	90	44
Gelstein, Lazaro	174	58
Gendzwell, Joyce	54	39
Geneczko, John T.	22	36
Genstler, Paul	214	65
George, Harry C.	90	44
Gerard, Donald G.	106	49
Gerard, Earl S.	102	46
Gerard, Roy J.	190	62
Gerbasi, Francis	126	53
Gerigk, Paul F.	218	66
Gerisch, Robert A.	222	74
Gerls, Frank B.	174	58
Gerondale, Elmond J.	222	74
Gerras, George Z.	62	40
Gerrits, James F.	194	63
Gerstner, Richard M.	102	46
Gertz, Michael A.	66	41
Gervin, Irfan S.	74	42
Gesink, Owen J.	186	62
Gesser, Charles	126	53
Getting, Vlado A.	218	66
Ghannam, Rasem	90	44
Gholz, Anthony C.	194	63
Gibbons, James J.	62	40
Gibbs, Floyd F.	106	49
Gibson, Dunbar P.	222	74
Gibson, Richard E.	102	46
Gibson, Robt. E. L., Jr.	122	52
Gibson, Wellington G.	174	58
Gibson, Wm.	222	74
Giddings, A. M.	34	37
Giese, Douglas H.	162	56
Giese, Fred W.	222	74
Gieser, E. Paul	34	37
Gift, Weldon A.	202	64
Gigante, Nicola	222	74
Gigliotti, David	222	74
Gignac, Ralph M.	218	66
Gikas, Paul W.	218	66
Gilbert, Harold R.	222	74
Gilbert, Ralph H.	106	49
Giles, Conrad L.	222	74
Gilfillan, Margery J.	34	37
Gilkey, William C.	114	52
Gill, Matthew J.	174	58
Gillard, James L.	162	56
Gillespie, Eleanor M.	198	64
Gillespie, Stephen M.	222	74
Gillett, Fredk. S.	106	49
Gillette, Clarence	26	36
Gillies, Robert W.	106	49
Gilmartin, Richard	114	52
Gilmore, John R.	194	63
Gilmore, Robert D.	190	62
Gilpin, Watson A.	222	74
Gilreath, James L.	222	74
Gilroy, John	222	74
Gimbel, Nicholas S.	222	74
Ging, Rosalie J.	218	66
Ginnebaugh, L. A.	90	44
Ginsberg, Harold I.	222	74
Girardot, John G.	34	37
Girnius, Birute	222	74
Gitlin, Charles	222	74
Gittins, Perry G.	222	74
Givens, Donovan H., Jr.	222	74
Gizynski, Waldemar E.	222	74
Gladstone, Wm. R., Jr.	54	39
Gladstone, Wm. S.	102	46
Glaser, Danl. F.	102	46
Glasgow, Gordon K.	222	74
Glazer, Walter S.	222	74
Glees, John L.	222	74
Glement, Raymond D.	222	74
Glen, Harold	174	58
Glenn, Edward A.	218	66
Glessner, James R., Jr.	106	49
Glickman, L. Grant	146	55
Glikman, Victor	222	74
Glotfelty, Philip R.	34	37
Glowacki, Ben F.	222	74
Glowacki, Edward T.	222	74
Glowacki, Raymond M.	222	74
Glynn, Kevin P.	218	66
Goddard, G. B.	10	35
Godley, Alegro J.	222	74
Goering, George R.	62	40
Goerke, Elmer A.	222	74
Goerner, Dorothy M.	174	58
Goethe, Roy M.	154	55
Goetz, Angus G.	222	74
Goetz, Margarete M.	62	40
Goetz, Rudolph	62	40
Goins, Wm. F.	222	75
Goldberg, Arthur	222	75
Goldberg, E. Marshall	62	75
Goldberg, Harry H.	222	75
Goldberg, Howard S.	174	58
Goldberg, Nathan H.	222	75
Goldberg, Salomea J.	106	49
Golden, Alfred	222	75
Golden, C. Jean	158	55
Golden, Evelyn	62	40
Golden, H. Maxwell	62	40
Golden, Michael F.	106	49
Goldfaden, Alfred	222	75
Goldin, Morris I.	126	53
Goldman, Aubrey	222	75
Goldman, Bernard J.	126	53
Goldman, Perry	222	75
Goldman, Robert T.	222	75
Goldner, Richard D.	190	62
Goldner, Roy E.	90	44
Goldrath, Milton H.	222	75
Goldsmith, Robert I.	218	66
Goldstein, Abe S.	222	75
Goldstein, Herbert	174	58
Gollman, Maurice D.	222	75
Goltz, Martha H.	162	56
Gomley, Henry G.	30	37
Gomley, Romuald H.	222	75
Gomon, Louis D.	190	62
Gonty, Arthur	146	55
Gonzalez, Carlos F.	194	63
Gonzalez, C. G.	26	36
Gonzalez, Salvador	126	53
Good, G. Robert	106	49
Good, Wayne T.	174	58
Goode, Norman J., Jr.	174	58
Goodhue, Lolita G.	102	46
Goodman, Maxwell M.	222	75
Goodman, Virgil P.	222	75
Goodreau, Paul G.	82	43
Goodrich, Dwight	70	42
Goodsell, John O.	190	62
Goodsell, J. Orton	190	62
Goodwin, Jack E.	190	62
Goodwin, Warren W.	222	75
Goodwin, William P.	222	75
Gordon, Clayton H.	174	58
Gordon, E. James	50	39
Gordon, Harold L.	154	55
Gordon, Marvin	222	75
Gordon, Wm. E.	222	75
Gorelick, Martin J.	222	75
Gorham, Arwin	54	39
Gorne, Saul, S.	62	40
Gorilla, Allen C.	66	41
Goryl, Stephen V.	222	75
Gosling, John R. G.	218	66
Goss, Saml. B.	222	75
Gostine, Edmond J.	222	75
Gotham, James E.	222	75
Gotman, Abraham G.	222	75
Gottlieb, Jacques S.	222	75
Gottlieb, Joel D.	218	66
Gotz, Alexander	218	66
Gouda, Salah E. A.	222	75
Goude, Albert G.	10	35
Gough, Joseph G.	34	37
Gould, Samuel	26	36
Gould, Stuart M., Jr.	218	66
Goux, Raymond S.	222	75
Gove, Robert S.	102	47
Govons, Sidney R.	90	44
Grabb, William C.	218	66
Grabiel, Amado	222	75
Grabowski, Walter	102	47
Grace, Jos. M.	222	75
Gracie, William A., Jr.	218	66
Gradolph, Paul L.	174	58
Grady, Jos. A.	222	75
Graf, Michael	102	47
Graff, Russell G.	106	49
Graham, Bernard J.	74	42
Graham, John G., Jr.	222	75
Graham, Theodore N.	222	75
Granger, Francis L.	222	75
Granger, George R.	222	75
Granowski, Karol	118	52
Grant, Abraham H.	222	75
Grant, Heman E.	222	75
Grant, Robert	154	55
Grasman, Erwin	162	56
Grass, Edward J.	106	49
Grate, Lawrence E.	170	57
Gratton, Henri L.	222	75
Graubner, Franklin L.	34	37
Grause, Thomas J.	14	35
Graves, James H.	206	64
Graves, James H.	222	75
Graves, Wm. H., III	218	66
Gray, Fred B.	106	49
Gray, Howard O.	222	75
Gray, J. Alan	34	37
Gray, Jerry M.	218	66
Gray, Murray H.	174	58
Grayson, Chas. J.	26	36
Grayson, Joseph R.	174	58
Greavu, Cornell, Jr.	110	52
Greek, Louis M.	222	75
Green, Barbara G.	26	36
Green, Edward W.	222	75
Green, Ellis R.	222	75
Green, Henry L.	222	75
Green, J. Donald	174	59
Green, Lewis	222	75
Green, Milton M.	222	75
Green, Nelson W.	222	75
Green, Ralph S.	174	59
Green, Robert L.	26	36
Green, Southgate J.	134	54
Green, Thomas, Jr.	222	75
Green, Willard M.	174	59
Greenbaum, Harry	98	45

Name	*County Code*	*Page*
Greenberg, Jack R.	222	75
Greenberg, Julius J.	222	75
Greenberg, Morris Z.	222	75
Greenberg, Stanley	222	75
Greene, James A., Jr.	218	66
Greene, John B.	222	75
Greene, Perry W., Jr.	106	49
Greene, Thomas J.	222	75
Greenlee, Wm. T.	222	75
Greenslit, Frank S.	222	75
Greenwood, James	14	35
Gregory, Louis J.	222	75
Greiner, Bert A.	222	75
Greiner, Robert A.	114	52
Grekin, John N.	222	75
Grekin, Robert H.	102	47
Grekin, Thomas D.	174	59
Gremel, Norman	102	47
Grennan, Lawrence E.	122	52
Grewe, Norman C.	154	55
Grey, Anna B.	90	44
Grier, William H.	222	75
Griffin, Ernest P., Jr.	62	40
Griffin, Robert J.	222	75
Griffith, Jack C.	34	37
Griffith, Lucian S.	106	49
Griffith, Robert M.	162	56
Griffiths, Sydney J.	222	75
Grigg, John W.	22	36
Grillo, S. Phillip	218	66
Grimaldi, Gregory J.	222	75
Grinstein, Alexander	222	75
Grishkoff, M. A.	222	75
Griva Lizlovs, Sylvia	222	75
Groat, Frank L.	186	62
Groat, Gerald	202	64
Grob, Otto	222	75
Grommons, Jack R.	62	40
Gronemeyer, Wm. H.	222	75
Groos, Harold Q.	50	39
Groos, Louis P.	50	39
Gros, Gerard	218	66
Grosenbaugh, Clare H.	106	49
Grossman, Solomon C.	222	75
Grost, James M.	46	38
Groustra, Glenn R.	214	65
Grover, Harold F.	62	40
Growt, Bowers H.	98	45
Grundset, Harold M.	26	36
Grunwaldt, Edgar	102	47
Guaty, Nestor C.	26	36
Gudes, David S.	222	75
Guerrero, Jose	222	75
Gugino, George J.	210	65
Guidot, Julian M.	222	75
Guile, Gurdon S.	62	40
Guimaraes, Abilio S.	222	75
Guinan, Geo. E.	222	75
Guindi, Mounir F.	222	75
Guindi, Saml. F.	222	75
Gulick, Arthur E.	222	75
Gullekson, Edwin H.	62	40
Gumpper, C. R.	62	40
Gunderson, Edw. P., Jr.	130	54
Gundry, Geo. L.	62	40
Gunn, James A.	106	49
Gunning, Robt. E. Lee	106	49
Gurden, Elizabeth A. L.	206	64
Gurdjian, Elisha S.	222	75
Gurskis, Eugenia E.	222	75
Gustafson, David C.	222	75
Gustafson, Everette	174	59
Gustin, Ralph D.	26	36
Gutow, Benjamin R.	222	75
Gutow, Isadore H.	62	40
Gutow, Richard F.	62	40
Gutowitz, Erwin	62	40
Gutterman, Meyer A.	174	59
Guyon, Jos. F.	62	40

Name	*County Code*	*Page*
Guyon, Mary A. W.	62	40
Guyton, Jack S.	222	75
Guzzo, Henry V.	38	38
Gwinn, Alexander B.	18	35
Haanes, Merle A.	174	59
Habel, Dan W.	218	66
Habenicht, Hilda A.	98	45
Haberlein, Chas. R.	70	42
Haberstroh, Colleen	154	55
Hack, Donald W.	162	56
Hacker, Elaine M.	222	75
Hackert, John L.	222	75
Hackett, Danl. J.	174	59
Hackett, Thos. L.	98	45
Hackley, Richard D.	62	40
Haddad, Benjamin F.	222	75
Haddad, Elias D.	222	75
Haddad, T. E.	74	42
Haddock, D. A.	102	47
Hadesman, Donald	222	75
Hadjimihaloglu, B. S.	222	75
Haeck, Wm., Jr.	106	49
Haefele, Leslie P.	222	75
Hafford, Robert C.	22	36
Hagans, James A.	102	47
Hagele, Marie A.	42	38
Hagelshaw, Gayland L.	22	36
Hager, Ralph	186	62
Hagerman, David B.	106	49
Hagerman, Geo. W.	218	66
Hagermoser, H. H.	222	75
Hagge, Donald R.	222	75
Hagman, George L.	174	59
Hague, Gilbert W.	174	59
Hague, Robt. F.	62	40
Hahne, Otto H.	126	53
Haidostian, B. H.	222	75
Haig, Owen G.	218	66
Haight, Cameron	218	66
Hailman, Harold F.	102	47
Haines, Ellen R.	222	75
Haitinger, K. S.	222	75
Haking, Leonard	222	75
Halac, Mehmet E.	34	37
Haldeman, Jack	142	54
Halekas, G. Peter	222	75
Hall, Arch H.	222	75
Hall, E. Walter	222	75
Hall, James W.	70	42
Hall, Ralph E.	222	75
Hall, Richard H.	222	75
Hall, Winthrop D.	222	75
Hallen, Leonard J.	222	75
Hallitt, John Wm.	62	40
Halsted, Lee H.	174	59
Hamady, Alfred	34	37
Hambalgo, George J.	174	59
Hamburg, Robt. H.	222	75
Hamburger, Albert C.	222	75
Hamburger, Joel I.	174	59
Hamburger, Stuart W.	222	75
Hamel, Herbert E.	42	38
Hamelink, Marinus H.	186	62
Hames, R. E.	90	44
Hamil, Brenton M.	222	75
Hamilton, Earl E.	70	42
Hamilton, John	114	52
Hamilton, Quentin P.	174	59
Hammel, Richard T.	114	52
Hammer, Edwin J.	222	75
Hammer, John M.	102	47
Hammer, Roy W.	222	75
Hammerberg, Kuno	74	42
Hammersley, Gordon	114	52
Hammond, Arthur E.	222	75
Hammond, James L.	222	75

Name	*County Code*	*Page*
Hammond, Walter W., Jr.	218	66
Hamp, Arthur K.	106	49
Hampshire, John K.	218	66
Han, Maolin	174	59
Hand, Eugene A.	190	62
Handel, Jack E.	222	75
Handorf, Heinrich H.	218	66
Haney, M. Bennet	110	52
Hank, Emil J.	222	75
Hankamp, Lamar J.	218	66
Hanley, Wm. J.	162	56
Hanna, Roger J.	90	44
Hannum, Marvin R.	218	66
Hansen, Carl M.	94	45
Hansen, Edwin L.	34	37
Hansen, Ernest G.	130	54
Hansen, Fredk. E.	222	75
Hansen, Harvey C.	34	37
Hansen, John Wm.	222	75
Hanson, Curtis M.	102	47
Hanson, Frederick N.	218	66
Hanyi, Karl	222	75
Hardie, Geo. G.	98	45
Hardstaff, R. John	222	75
Hardt, Barbara A.	222	75
Hardy, Clarence M.	222	75
Hardy, Geraldine M.	222	75
Hardy, Warren G.	222	75
Hare, J. Donald	102	47
Harebottle, Norman	118	52
Harelik, Ely W.	222	75
Harkaway, Roman W.	222	75
Harley, Garth H.	222	75
Harley, Louis M.	222	75
Harm, Winfred B.	222	75
Harmon, Edwin L.	222	75
Harmon, Lewis G.	174	59
Harmon, Walter, Jr.	222	75
Harms, Herman P.	186	62
Harnett, R. W. F.	222	75
Harper, Jesse T.	222	75
Harper, Robt. H.	62	40
Harrell, E. R., Jr.	218	66
Harrell, Frank G.	102	47
Harrelson, Wm. D.	102	47
Harrigan, William E.	154	55
Harrigan, Wm. L.	74	42
Harrington, Edw. B.	222	75
Harrington, F. L.	222	75
Harrington, Harvey M.	42	38
Harrington, Louis E.	90	44
Harrington, Rex R., Jr.	66	41
Harris, A. D.	222	75
Harris, Bernard J.	62	40
Harris, Bradley M.	218	66
Harris, Donald M.	222	75
Harris, Donald R.	62	40
Harris, Geo. P.	190	62
Harris, Harcourt G.	222	75
Harris, Harold H.	222	75
Harris, Herbert W.	90	44
Harris, Ivor D.	222	75
Harris, Scott T.	218	66
Harris, W. Richard	162	56
Harrison, Robt. E.	114	52
Harrison, Robert W.	106	49
Harrison, Wm. H.	90	44
Harrity, William A.	222	75
Harrod, Gordon R.	58	39
Harrold, Jesse F.	90	44
Harrold, John A.	174	59
Harroun, John E.	206	64
Harroun, R. V.	206	64
Harryman, James E.	162	56
Hart, Charles E.	222	75
Hart, John C.	222	75
Hart, Robt. K.	202	64
Hart, Zwi H.	222	75
Hartkop, Henry H.	222	75

Name	County Code	Page	Name	County Code	Page	Name	County Code	Page
Hartman, Robt. T.	218	66	Heine, John	62	40	Hertzler, Jack H.	222	76
Hartmann, Waldemar B.	126	53	Heinemann, H. J.	62	40	Herwick, John T.	222	76
Hartquist, Robt. J.	222	75	Heinle, Robt. W.	102	47	Hess, Chas. L.	22	36
Hartwell, Shattuck, W.	162	56	Heinmiller, E. C.	190	62	Hess, Joseph W.	222	76
Hartzell, John B.	222	75	Heins, Marilyn	222	76	Hess, Murray W.	222	76
Hartzell, John M.	222	75	Heitsch, Wm. C.	110	52	Hessburg, Philip C.	222	76
Harvey, Campbell	174	59	Helbling, Edw. J., Jr.	186	62	Hesselschwerdt, D. W.	106	49
Harvey, Dennis	186	62	Helcher, Phyllis O.	62	40	Hester, Eustace G.	190	62
Harvey, John G. Klemm	162	56	Helder, Louis	106	49	Heuser, Harold H.	22	36
Harvie, Lloyd C.	190	62	Heldt, Richard F.	222	76	Heustis, Albert E.	90	44
Hasegawa, Carl M.	222	75	Heldt, Thos. J.	222	76	Hewes, Wm. H.	114	52
Haskell, Robt. H.	94	45	Helferty, Robert D.	62	40	Heyboer, Donald J.	174	59
Hasley, Clyde K.	222	75	Helman, Norman	222	76	Heyman, Louis F.	222	76
Hasley, Danl. E.	222	75	Helmer, Fredric A.	62	40	Heyner, C. S.	222	76
Hassan, D. Kent	26	36	Helmkamp, Herbert O.	190	62	Heyner, Fredk. J.	222	76
Hassberger, John B.	174	59	Helmus, Christian	106	49	Heyner, Stanley A.	222	76
Hassett, Gerard R.	222	75	Helzerman, Ralph F.	114	52	Hibbs, Donald K.	34	37
Hassig, Walter W.	222	75	Hendelman, Manuel H.	222	76	Hickey, Jos.	222	76
Hastings, Orville J.	222	76	Henderson, Allison B.	222	76	Hickman, John K.	38	38
Hasty, Willis A.	178	61	Henderson, Arthur B.	222	76	Hickman, Marjorie J.	34	37
Haszczyc, Vladimir A.	222	76	Henderson, Chas. W.	222	76	Hickok, David K.	218	66
Hathaway, Hubert R.	222	76	Henderson, Fred C.	26	36	Hickox, Leland A.	142	54
Hathaway, Wm. S.	174	59	Henderson, F. C.	222	76	Hicks, Fredk. G.	222	76
Hatton, Richard L.	90	44	Henderson, Harold	222	76	Hicks, Glenn C.	98	45
Haubrich, Wm. S.	222	76	Henderson, H. R.	174	59	Hicks, R. P.	122	52
Hauer, R. Fred	118	52	Henderson, Hugh W.	222	76	Hicks, Samuel P.	218	66
Haupt, Edward C.	26	36	Henderson, Jack A.	186	62	Hier, Edward A.	14	35
Hause, Glen E.	222	76	Henderson, James E.	174	59	Higby, Thomas F.	118	52
Hauser, Fredk. V.	62	40	Henderson, John W.	218	66	High, Robert H.	222	76
Hauser, I. Jerome	222	76	Henderson, Leslie T.	222	76	Higuera, J. Gilberto	222	76
Hauser, John E.	222	76	Henderson, Norman D.	90	44	Hildebrandt, H. Mark	218	66
Hauser, Maurice J.	222	76	Henderson, Philip M.	34	37	Hildner, Frank J.	222	76
Havers, Howard	222	76	Henderson, Wm. E.	222	76	Hildreth, Roscoe C.	102	47
Hawkins, James E.	62	40	Henderson, Worth W.	174	59	Hill, A. Morgan	106	49
Hawkins, James W.	222	76	Hendra, Alan K.	222	76	Hill, Edward J., Jr.	222	76
Hay, Kent R.	90	44	Hendren, Jesse J.	118	52	Hill, Harold C.	118	52
Hayden, H. S.	174	59	Hendren, Owen S.	174	59	Hill, Raymond D.	222	76
Hayden, Royal C., Jr.	222	76	Hendricks, Frank R.	174	59	Hill, Robert V.	198	64
Hayes, Allen L.	222	76	Hendrix, J. W.	102	47	Hill, Thos. B.	106	49
Hayes, L. W., Sr.	106	49	Hendrix, Robt. C.	218	66	Hill, Victor, Jr.	190	63
Hayes, Louis F.	150	55	Henelt, Edmond	78	42	Hill, Welford T.	222	76
Hayes, Robert E.	106	49	Heneveld, John	162	56	Hillenberg, Sidney J.	222	76
Hayes, Robt. E.	90	44	Heneveld, Robt. G.	162	56	Hiller, Glenn I.	222	76
Hayes, Thomas A.	106	49	Henig, Benj. E.	150	55	Hiller, Herbert M.	126	53
Hayes, Thos. P.	26	36	Henig, Fred N.	222	76	Hillmer, Raymond E.	82	43
Hayes, Willard N.	54	39	Henkin, Raymond	222	76	Hills, David W.	26	36
Hayford, Wm. D.	90	44	Henkin, Wm. A.	222	76	Hillyer, John W.	222	76
Hayner, Russell A.	102	47	Hennessey, Alan T.	222	76	Hilton, Wm. E.	222	76
Hays, James D.	10	35	Hennessy, Charles R.	62	40	Himler, Leonard E.	218	66
Hazen, Roy S.	222	76	Hennessy, Mary E.	162	56	Himmelberger, R. J.	90	44
Hazledine, H. L.	194	63	Henrich, Laurence E.	222	76	Hinchman, D. F.	222	76
Heald, Gordon H.	90	44	Henriksen, J. D.	34	37	Hinerman, Dorin L.	218	66
Heard, Wm.	186	62	Henry, Colonel R.	174	59	Hines, Ronald G.	190	63
Heaslip, Jos. D.	18	35	Henry, L. Dell	218	66	Hing, N. G. Harry	218	66
Heath, Leonard P.	222	76	Henry, Robert C.	222	76	Hipps, Chauncey J.	222	76
Heaton, John R.	106	49	Hensel, Hilda M.	158	55	Hiraga, Mikio H.	218	66
Heavenrich, Robt. M.	190	62	Hensley, Chas. B.	174	59	Hirsch, Leo J.	222	76
Heavner, Lyle E.	222	76	Henthorn, Arthur C.	46	38	Hirsch, Lore	222	76
Hecht, Manes S.	174	59	Herald, Osbie J.	162	56	Hirschfeld, A. H.	222	76
Heckert, Frank B.	90	44	Herbert, Walter N.	102	47	Hirzel, Leon S.	126	53
Heekert, Jos. K.	90	44	Herbst, Harold B.	222	76	Hiscock, Harold H.	62	40
Hedges, Frank W.	74	42	Hereza, Valeriano D.	190	62	Hiscoe, D. Bonta	90	44
Heenan, Theophilus H.	222	76	Hergt, Klaus	222	76	Hislop, David M. C.	194	63
Heerdt, Mark E.	90	44	Herkner, Mildred L.	70	42	Hiss, Roland G.	218	66
Heeres, Dale W.	162	56	Herman, Edward L.	174	59	Hlivko, Alexander E.	194	63
Heersma, H. Sidney	102	47	Hermes, Charles R.	174	59	Hnatchuk, Nicholas	158	55
Heetderks, Dewey R.	106	49	Herrero, Eduardo M.	222	76	Hoagland, F. L.	222	76
Heetderks, D. R., Jr.	106	49	Herrero, Eduardo U.	222	76	Hoban, Sean J.	190	63
Heffelfinger, John C.	30	37	Herrick, Ruth	106	49	Hobbs, A. Deane	74	42
Hefferman, Daniel D.	154	55	Herrington, C. Clark	86	43	Hobbs, Donald V.	222	76
Heffron, Chas. H.	114	52	Herrington, Chas. I.	86	43	Hochman, Morton M.	222	76
Heffron, C. Harold	114	52	Herrington, K. B.	86	43	Hockman, Thomas A.	62	40
Heffron, Howard H.	114	52	Herrold, Rose E.	222	76	Hockstad, Raymond	50	39
Hegener, Aloysius J.	170	57	Herschelmann, Roy F.	222	76	Hodge, Chas. L.	78	42
Heideman, Louis E.	222	76	Hersee, Wm. E.	74	42	Hodges, Frank V.	62	40
Heidenreich, John R.	146	55	Hersey, E. Freeman	102	47	Hodges, Fred J.	218	66
Heil, Edward R.	222	76	Hersey, Margaret S.	102	47	Hodges, Jason	222	76
Heilbronn, Duane B.	190	62	Hershey, Ernest A., Jr.	222	76	Hodgins, Thomas	194	63
Heilman, Robert D.	42	38	Hershey, Noel J.	26	36	Hodgkinson, Chas. P.	222	76

Name	*County Code*	*Page*
Hodgkinson, C. P., II	106	49
Hodgman, Albert B.	102	47
Hodgman, Richard W.	102	47
Hoekman, Aben	174	59
Hoeksema, Ronald H.	30	37
Hoekstra, Andrew L.	106	49
Hoekstra, George J.	102	47
Hoekstra, Philip J.	106	49
Hoffer, Thos.	222	76
Hoffer, W. E.	90	44
Hoffman, Ben G.	222	76
Hoffman, Edward A.	222	76
Hoffman, Edwin S.	222	76
Hoffman, Harry Y.	222	76
Hoffman, Henry A.	222	76
Hoffman, Howard B.	138	54
Hoffman, Louis	222	76
Hoffman, Milton C.	222	76
Hoffman, Stanley	118	52
Hoffs, Albertus J.	106	49
Hoffs, Marinus A.	18	35
Hofstra, John	206	64
Hogg, Raymond E.	90	44
Hogikyan, Azat	222	76
Holcomb, Russell J.	194	63
Holder, Benj. B.	154	55
Holdredge, Jean M.	222	76
Holkeboer, Henry D.	106	49
Holland, Chas. F.	90	44
Hollander, Abraham J.	222	76
Hollander, Stephen	106	49
Hollinger, F. Wayne	222	76
Hollis, Henry B.	222	76
Hollis, John W.	62	40
Holloway, Janet L.	222	76
Holly, Leland E.	162	56
Holly, Leland E., II	162	56
Holm, Leo H.	162	56
Holmes, Donald J.	218	66
Holmes, Geo. F.	222	76
Holmes, Keith M.	174	59
Holst, John B.	98	45
Holt, Chas. J., Jr.	222	76
Holt, Henry T.	222	76
Holt, John F.	218	66
Holt, Willard, Jr.	174	59
Holtom, Benj. G.	34	37
Holtz, Fred	218	66
Homeister, Eugene A.	222	76
Hommerson, H. J.	186	62
Homsi, Rateb	170	57
Honhart, Fred L.	222	76
Hoogerhyde, Jack	106	49
Hooker, Lyle T.	34	37
Hooper, Virgil R.	62	40
Hopkins, Andrew J.	222	76
Hopkins, George C.	222	76
Hopkins, Melvin	174	59
Hopkins, Scovell M.	222	76
Hopkins, William F.	134	54
Hopkins, Wm. J.	174	59
Hopson, George H.	146	55
Hopson, Patricia C.	146	55
Horkins, Earl J.	222	76
Horn, Robt. C., Jr.	222	76
Hornbeck, Robert J.	222	76
Hornbeck, Wm. J.	162	56
Hornbogen, Danl. P.	134	54
Horning, David J.	106	49
Horny, Hugo O.	222	76
Horowitz, Saml. F.	22	36
Horrell, Eugene D.	222	76
Horton, Reece H.	222	76
Horvath, Francis	90	44
Horvath, James J.	222	76
Horvath, Julius	126	53
Horvitz, Victor S.	222	76
Hoshal, Verne L.	206	64
Hoski, A. Joseph	126	53
Hosking, Fredk. S.	82	43
Hoskins, Phillip A.	218	66
Hotchkiss, Loris M.	222	76
House, Clifford	110	52
House, Frederic B.	218	66
House, Glenn W., Jr.	94	45
House, Robert J.	62	40
Howard, Frank W.	26	36
Howard, Philip J.	222	76
Howard, Stacy C.	218	66
Howard, W. Leonard	218	66
Howard, Willard H.	102	47
Howard, Willam K.	222	76
Howarth, Thos. W.	150	55
Howatt, William F.	218	66
Howe, Donnell C., Jr.	42	38
Howe, Gertrude E.	90	44
Howe, Irvin M.	154	55
Howe, Lloyd W.	134	54
Howell, Bert F.	222	76
Howell, James T.	222	76
Howell, Lynn E.	174	59
Howell, Richard H.	154	55
Howes, Homer A.	222	76
Howie, Charles	90	44
Howland, Walter L.	74	42
Howlett, Howard T.	222	76
Howlett, Robt. R.	210	65
Hoyos, Pedro G.	222	76
Hoyt, Chas. N.	174	59
Hoyt, John C.	90	44
Hoyt, Robt. L.	106	49
Hromadko, Louis	222	76
Hruschka, Myroslaw	174	59
Hsu, John J.	174	59
Hubbard, Edwin M.	102	47
Hubbard, John P., Jr.	222	76
Hubbard, Wm. B.	62	40
Hubbard, Wm. C.	62	40
Hubbard, Wm. N., Jr.	218	66
Hubbell, Reader J.	70	42
Huber, Philip J.	222	76
Hubert, John R.	174	59
Hubinger, H. L.	190	63
Hubly, James W.	34	38
Huckins, Rodger S.	22	36
Hudnutt, Dean	26	36
Hudson, A. Thomas	106	49
Hudson, Harry C.	106	49
Hudson, J. Stewart	222	76
Hudson, Wm. A.	222	76
Hudspeth, E. Rae	222	76
Huebl, Hubert C.	222	76
Huebner, R. J.	18	35
Huegli, Wilfred A.	222	76
Huene, Nevin	70	42
Huff, Harold D.	26	36
Huffman, Elston R.	134	54
Hufford, A. Ray	106	49
Hufton, Wilfrid L.	62	40
Huggett, Clare C.	90	44
Huggins, H. Horne	222	76
Hughes, Calvin H.	222	76
Hughett, Arthur J.	222	76
Huizenga, Philip B.	218	66
Huldin, Donald H.	98	45
Hulet, Ralph M.	218	66
Hulick, Archie G.	222	76
Hull, Frank J.	126	53
Hull, Leroy W.	222	76
Hullerman, Hugo V.	222	76
Hult, Otto S.	50	39
Hume, H. Ross, Jr.	222	76
Hume, Robt. H.	102	47
Huminski, Thaddeus S.	222	76
Hummel, Arthur R.	222	76
Humphrey, Archie E.	34	38
Humphrey, Arthur A.	34	38
Humphrey, Herbert E.	34	38
Humphrey, James C.	106	49
Humphrey, William C.	134	54
Hunt, Andrew D., Jr.	90	44
Hunt, Jack	102	47
Hunt, Maurice E.	190	63
Hunt, Philip	114	52
Hunt, Richard J.	62	40
Hunt, Theodore H.	222	76
Hunt, Verne G.	222	76
Hunter, Donald G.	222	76
Hunter, Robert B.	222	76
Huntington, John	34	38
Huntley, Richard A.	162	56
Hurd, Clayton E.	62	40
Huron, Willis H.	54	39
Hurth, M. S.	90	44
Husband, Chas. W.	222	76
Husband, Raymond C.	222	76
Huston, R. R.	70	42
Hutchins, M. Colton	222	76
Hutchinson, F. A.	106	49
Huyser, Wm. C.	102	47
Hyatt, Jarvis M.	222	76
Hyde, Fredk. W., Jr.	222	76
Hydrick, Robt. H.	106	49
Hyland, John R.	222	76
Hyman, Saml. J.	218	66
Hymes, Alan C.	222	76
Hyslop, Wm. T.	190	63
Hysni, Aliqemal	222	76
Iacobell, Peter H.	222	76
Iacobellis, M.	222	76
Ice, Garnet T.	222	76
Ideson, Robert S., II	218	66
Iglesias, Ernesto R.	126	53
Iglesias, Luis J.	222	76
Igna, Eli J.	222	76
Ignagni, Antonio	222	76
Ignatius, Aram A.	174	59
Iizuka, Reiichi	190	63
Imamoglu, Kamil	222	76
Imeson, Elizabeth W.	90	44
Inchaustegui, H.	174	59
Indenbaum, Samuel	222	76
Ine, Myung Yul	222	76
Infante, A.	190	63
Ingberg, Harry O.	222	76
Ingold, John A.	174	59
Inman, John C.	226	68
Ireland, Hoesa D.	106	49
Irgens, Edwin R.	26	36
Irish, Lawrence R.	62	40
Irvin, Earle A.	222	76
Irvine, Lionel E.	54	39
Irwin, James R.	106	49
Irwin, Jerry L.	106	49
Irwin, Wm. A.	222	77
Irwin, Wm. D.	102	47
Isaac, Herbert L.	174	59
Isaacs, Eli M.	126	53
Isaacson, Arthur	222	77
Isaacson, Harold E.	222	77
Isaacson, Jo D.	222	77
Isbey, Edward K.	126	53
Isbister, J. L.	90	44
Isgut, Robert D.	174	59
Israel, Barney B.	222	77
Israel, Kenneth	222	77
Itkin, H. David	222	77
Ittner, Martin J.	154	55
Itzen, John F.	214	65
Iung, Omero S.	90	44
Ivkovich, Peter	126	53
Iwata, Herbert T.	222	77
Izner, Bernice	222	77
Izner, Sanford M.	222	77

Name	*County Code*	*Page*
Jack, Wm. W.	106	49
Jacknow, David	222	77
Jackson, Franklin R.	222	77
Jackson, Philip J.	174	59
Jackson, Wm. F.	14	35
Jackson, Winston B.	222	77
Jacob, Jos. S.	218	66
Jacob, S. Sprigg, III	90	44
Jacobi, Rodman C.	174	59
Jacobowitz, John M.	198	64
Jacobs, Donald J.	54	39
Jacobs, Howard	222	77
Jacobs, Manuel	126	53
Jacobson, Dwight	34	38
Jacobson, Lyle F.	222	77
Jacobson, Saml. D.	222	77
Jacobus, Wayne N.	222	77
Jacoby, John S.	62	40
Jacques, J. E.	22	36
Jaedecke, Robt. G.	134	54
Jaeger, Grove A.	222	77
Jaekel, Clarence N.	222	77
Jaffar, Donald J.	222	77
Jaffe, Burton	218	66
Jaffe, Harold W.	222	77
Jaffe, Jacob	222	77
Jaffe, Louis	222	77
Jaffe, Martin D.	22	36
Jagnow, Nanette	174	59
Jahsman, Wm. E.	222	77
Jakacki, Richard Wm.	222	77
James, John W.	190	63
James, Robert E., Jr.	174	59
James, Robt. E.	62	40
James, Thomas N.	222	77
Jameson, Fred M.	106	49
Jamieson, Thos. J.	222	77
Janicki, Natalia J.	222	77
Janis, Anton J.	82	43
Janke, Robert A.	102	47
Janke, Walter H.	62	40
Jaracz, Walter J.	106	49
Jaracz, Walter J., Jr.	106	49
Jardine, Hugh M.	150	55
Jardinico, Robert	190	63
Jarka, Robert W.	106	49
Jarstfer, Bruce S.	90	44
Jarre, Hans A.	222	77
Jarvi, Rudolph M.	190	63
Jarvis, Chas., Jr.	106	49
Jarvis, Harold F.	222	77
Jasion, Lawrence J.	222	77
Jaynes, Richard V.	222	77
Jayson, Michael H.	202	64
Jeffrey, James R.	34	38
Jeffries, Benj.	222	77
Jeffries, Frank W.	218	66
Jend, Wm., Jr.	222	77
Jend, Wm. J.	222	77
Jender, Joseph G.	218	66
Jenkins, Elwood A.	222	77
Jenkins, Henry L.	174	59
Jennings, Chas. G.	222	77
Jennings, John A.	174	59
Jennings, Larry E.	98	45
Jennings, Robt. M.	102	47
Jensen, Viggo W.	222	77
Jensen, William B., Jr.	106	49
Jesson, Robt. M.	162	56
Jevons, William H.	222	77
Jewell, F. C.	222	77
Jewell, James H.	126	53
Jewell, John S.	222	77
Jewell, Marvin R.	222	77
Jewell, Patrick F.	106	49
Jimenez, B.	218	66
Jochems, Dirk G.	26	36
Jocz, Marion W.	222	77
Jodar, Emery O.	222	77

Name	*County Code*	*Page*
Jodar, Loyal W.	222	77
Joerin, Wm. A.	98	45
John, Hubert R.	222	77
Johns, Donald C.	106	49
Johnson, A. Esther	158	55
Johnson, Aran S.	222	77
Johnson, Arthur H., Jr.	62	40
Johnson, Arthur J.	222	77
Johnson, C. A.	178	61
Johnson, Clare G.	174	59
Johnson, David B.	90	44
Johnson, Elwin B.	10	35
Johnson, Fenimore T.	102	47
Johnson, Frank D.	62	40
Johnson, Frank D.	74	42
Johnson, Gage	222	77
Johnson, G. T.	190	63
Johnson, Harold C. A.	214	65
Johnson, Harrison H.	10	35
Johnson, Henry T.	90	44
Johnson, Homer L.	222	77
Johnson, J. Frederic	174	59
Johnson, Kenneth H.	90	44
Johnson, Melvin, Jr.	34	38
Johnson, Orlen J.	22	36
Johnson, Paul S.	218	66
Johnson, Philip R.	74	42
Johnson, Raymond E.	62	40
Johnson, Richard	90	44
Johnson, Robert B.	74	42
Johnson, Robt. D.	218	66
Johnson, Robert H.	174	59
Johnson, Simon O.	222	77
Johnson, Thos. D.	222	77
Johnson, Verne E.	222	77
Johnson, Vernon P.	222	77
Johnson, Wilbur E.	222	77
Johnson, Wm. H. M.	222	77
Johnston, Dan W.	106	49
Johnston, E. H.	162	56
Johnston, Everett V.	222	77
Johnston, Franklin D.	218	66
Johnston, Herbert C.	222	77
Johnston, James D.	70	42
Johnston, Jos. A.	222	77
Johnston, Thomas C.	194	63
Johnston, Wm. E.	222	77
Johnston, Wm. H.	26	36
Johnston, Wm. L.	106	49
Johnstone, Benj. I.	222	77
Johnstone, Kermit T.	190	63
Joinville, Euclide V.	222	77
Joistad, Arthur H., Jr.	162	56
Jones, Arnold M.	222	77
Jones, Aubrey H.	34	38
Jones, Cyril D.	174	59
Jones, David H.	218	66
Jones, David L.	86	43
Jones, Edward A., Jr.	106	49
Jones, Elizabeth	218	66
Jones, Ernest F.	34	38
Jones, Francis A., Jr.	90	44
Jones, G. Richard	222	77
Jones, Haven E.	106	49
Jones, Martin F.	90	44
Jones, M. Culver	22	36
Jones, Roy D.	222	77
Jones, Tyre K.	34	38
Jones, Tyre K., III	22	36
Jones, Wm. I.	222	77
Jones, Wm. S.	146	55
Jones, Wm. S., Jr.	146	55
Joos, Thad H.	222	77
Jordan, Leo A.	190	63
Jordan, Paul H.	62	40
Jordan, Prescott, Jr.	222	77
Jordan, R. Gerald	222	77
Joseph, Daniel D.	58	39
Joseph, Ramon R.	222	77

Name	*County Code*	*Page*
Joseph, Sydney	218	66
Joyce, John A.	174	59
Joyce, Stanley J.	222	77
Joyrich, Myron H.	222	77
Judd, Alvin E.	62	40
Judge, Richard D.	218	66
Juhnke, LeRoy W.	74	42
Jui, John O. L.	106	49
Julian, Mark D.	218	66
Juliar, Benj.	222	77
June, Robt. C.	90	44
Jungwirth, R. V.	222	77
Jury, Donald B.	174	59
Kabza, Theodore G.	218	66
Kackley, James E.	222	77
Kadian, George	174	59
Kadrnka, Frank O.	102	47
Kahn, David	90	44
Kahn, Edgar A.	218	66
Kahn, Oscar B.	194	64
Kain, Thomas R.	222	77
Kaine, Henry D.	222	77
Kalayjian, Bernard S.	222	77
Kale, Waman M.	106	49
Kalichman, Nathan	222	77
Kallenbach, Rudolf W.	222	77
Kallet, Herbert I.	222	77
Kallet, Maerit B.	222	77
Kallman, David	222	77
Kallman, Leo	222	77
Kallman, Reuben R.	222	77
Kalmbach, Roland E.	90	44
Kambly, Arnold H., Jr.	218	66
Kambouris, Angelow A.	222	77
Kamil, Richard S.	222	77
Kamm, Robert L.	174	59
Kammeraad, L. A.	106	49
Kamp, Robt. L.	70	42
Kandel, Robert F.	222	77
Kane, Archibald V.	222	77
Kane, Elizabeth D.	134	54
Kane, John P.	126	53
Kane, Peter V.	126	53
Kane, Thos. J.	162	56
Kane, Wm. J.	126	53
Kansa, Selma	222	77
Kanter, Herman	222	77
Kapetansky, Don I.	222	77
Kapetansky, Nathan J.	222	77
Kapik, Armand	102	47
Kaplita, Walter A.	222	77
Kapphahn, K. H.	222	77
Kaprielain, M.	222	77
Karadeloglou, B.	222	77
Karakue, Raymond J.	174	59
Karamatas, Philip C.	222	77
Karca, N. Naci	174	59
Karch, Saul	222	77
Karr, Jean P.	98	45
Karr, Paul H.	62	40
Kasabach, Harry Y.	222	77
Kasabach, Vahram Y.	222	77
Kashtan, Harry A.	222	77
Kasper, Jos. A.	222	77
Kaspor, Albert J.	222	77
Kass, Arnold	222	77
Katlein, Stanley	90	44
Katz, Austin M.	174	59
Katz, Lawrence	222	77
Katz, Martin	222	77
Katz, Sidney F.	174	59
Katzman, Harold L.	222	77
Katzman Irving S.	222	77
Kaufer, Herbert	218	66
Kaufman, Jack H.	222	77
Kaufman, Jacob M.	174	59

Name	County Code	Page
Kaufman, James N.	70	42
Kaufman, Lewis D.	62	40
Kaufman, Louis W.	222	77
Kaufman, William H.	222	77
Kaump, Donald H.	218	66
Kavanaugh, John	102	47
Kavanaugh, T. E.	102	47
Kavanaugh, Wm. R.	102	47
Kawchak, James	222	77
Kawecki, Lucian	222	77
Kawel, Conrad A., Jr.	222	77
Kay, Cecelia S.	162	56
Kay, Sherman A.	174	59
Kazdan, Louis L.	174	59
Kazdan, Morris	222	77
Kazmers, Nikolas	94	45
Kearney, Jos. B.	186	62
Kearney, Martin J.	122	52
Keefer, Albert H.	98	45
Keeffe, Eugene J.	174	59
Keeler, Kenneth B.	34	38
Keeler, Van O.	10	35
Keemer, Edgar B., Jr.	222	77
Keep, Pliny M.	102	47
Keese, Antonia J.	218	66
Kehoe, Henry J.	222	77
Keilin, Marie	162	56
Keitges, P. W.	126	53
Keith, Kelly	174	59
Keith, Rachel H. C. B.	222	77
Keizer, B. G.	122	52
Kelin, Maximilian	222	77
Kellawan, Karl K.	138	54
Kelleher, Geo. T.	34	38
Kellerman, Howard H.	90	44
Kelley, Donald E.	106	49
Kelley, Frank J.	222	77
Kelley, Jack L.	218	66
Kelley, Paul A.	218	66
Kelly, Alexander P., Jr.	222	77
Kelly, Edward W., Jr	222	77
Kelly, James E.	62	40
Kelly, John J.	222	77
Kelly, Larry Stanley	22	36
Kelly, L. J.	222	77
Kelly, William	90	44
Kelmenson, Victor A.	222	77
Kelsall, Harvey I.	26	37
Kelso, Saml. N., Jr.	158	55
Kelson, Malcolm J.	222	77
Kemme, Gerrit J.	186	62
Kemp, Felix J.	174	59
Kemp, Wallace R., Jr.	218	66
Kempers, David W.	106	49
Kemph, John P.	218	66
Kempter, Albert H.	106	49
Kempton, Geo. B.	98	45
Kendrick, H. F., Jr.	174	59
Kenfield, W. J.	26	37
Kennary, James M.	222	77
Kennary, James M., Jr.	222	77
Kennedy, Chas. S.	222	77
Kennedy, Donald J.	222	77
Kennedy, F. Alan	26	37
Kennedy, John J.	206	64
Kennett, Donald M.	62	40
Kennison, Warren S.	174	59
Kent, A. Edith Hall	90	44
Kent, Herbert K.	90	44
Kenyon, Fanny H.	90	44
Kerlikowske, A. C.	218	66
Kernath, James E.	222	77
Kern, James W.	218	66
Kern, Wheeler H.	218	66
Kernick, Melvin O.	222	77
Kerr, Edwin C.	174	59
Kerr, Howard J.	162	56
Kerr, Wm. B.	190	63
Kerry, Robert L.	218	66
Kershul, Victor W.	218	66
Kerwell, Karm C.	146	55
Kerwin, George R.	222	77
Kessel, Karl J.	222	77
Kessler, Chas.	222	77
Kessler, Dale L.	106	49
Kessler, Harold	14	35
Kessler, Sabina Frux	22	36
Ketcham, Donn W.	106	49
Ketchum, Jesse	174	59
Kettler, Hans J.	174	59
Kettunen, Robert C.	102	47
Keyes, James T.	190	63
Keyes, John W.	222	77
Kheder, Jamil	218	67
Khodadadeh, B.	174	59
Kiekham, Edward F.	190	63
Kiehler, E. G., II	110	52
Kieler, George E.	150	55
Kiessling, A. J., Jr.	98	45
Kihm, John L.	102	47
Kiley, James A.	130	54
Kilgore, Robert N.	102	47
Kilic, Orhan	26	37
Killins, Chas. G.	222	77
Kilmer, Paul B.	142	54
Kim, S. J.	110	52
Kimberlin, K. K., Jr.	222	77
Kimbrough, C. B.	62	40
Kimbrough, Wm. W.	218	67
Kimmich, R. A.	90	44
Kincaid, Joseph E.	102	47
Kincaid, William E.	106	49
Kinde, Matthew R.	34	38
King, Edward D.	222	77
King, Frank A., Jr.	26	37
King, John R.	158	55
King, Melbourne J.	222	77
Kingsley, Joyce W., Jr.	126	53
Kingsley, Paul C.	34	38
Kingswood, Roy C.	222	77
Kinsley, George	174	59
Kinzel, Raymond C.	90	44
Kipp, Paul R.	126	53
Kirban Harry N.	194	64
Kirk, Thomas R.	170	57
Kirker, J. G.	194	64
Kirsten, Walter T.	62	40
Kirtland, Wm. B., Jr.	126	53
Kislov, Richard	162	56
Kitchel, John H.	186	62
Kitchel, Mary F. S.	186	62
Kitti, Wm. W.	70	42
Kittleson, Arthur C.	218	67
Kitto, Harold J.	62	40
Kitzmiller, John L.	222	77
Kivi, Louis P.	218	67
Klaiber, Roger G.	222	77
Klass, Arthur	174	59
Klauer, James D.	74	42
Kleaveland, Ingram J.	162	56
Kleber, John A.	214	65
Kleekamp, Herbert G.	190	63
Klegman, Jerome H.	174	59
Klein, Alfred A.	126	53
Klein, Herman	222	77
Klein, Howard A.	222	77
Klein, Jacob E.	106	49
Klein, J. Paul	166	57
Klein, Marvin E.	174	59
Klein, Sander P.	222	77
Klein, Thomas	106	49
Klein, Wm.	222	77
Kleinman, Shmarya	222	77
Kleinschmidt, Earl E.	190	63
Kleinschmidt, Gladys J.	138	54
Klerk, Wm. J.	102	47
Klewicki, H. A.	174	59
Kliger, David	222	77
Klimchuk, M. M.	222	77
Klimkowski, Edw. J.	222	77
Kline, David G.	218	67
Kline, O. F.	62	40
Kling, George A.	222	77
Kling, Murray G.	222	77
Klomparens, James T.	106	49
Klooster, Gerald	106	49
Klopp, Edward J.	34	38
Klos, Henry J.	26	37
Klosowski, Jos.	222	77
Kluck, Clarence J.	222	77
Klunzinger, W. R.	90	44
Klutke, George H. E.	222	77
Knaggs, Earl J.	222	78
Knapp, Floyd B.	222	78
Knapp, Gary H.	222	78
Knapp, Gordon R.	222	78
Knapp, Wm. D.	62	40
Knapp, Wm. L.	222	78
Knecht, Richard A.	170	57
Knighton, Robert S.	222	78
Knights, Edwin M., Jr.	174	59
Knisely, Wm. H.	90	44
Kniskern, Paul W.	106	49
Knoblauch, K. H.	126	53
Knoblich, Roman R.	62	40
Knobloch, Edmund J.	222	78
Knobloch, Howard T.	22	36
Knoll, Leo A.	218	67
Knopf, Merrill M.	222	78
Knox, Richard S.	174	59
Knox, Ross M.	222	78
Knutson, Geo. O.	134	54
Kobernick, Sidney D.	222	78
Kobiljak, Stefan H.	222	78
Kobs, Robert J.	98	45
Koch, Donald A.	194	64
Kocur, Lubomira	110	52
Koebel, Raymond H.	222	78
Koehler, Wm. H.	174	59
Koek, Hendrik J.	222	78
Koenig, Harry	134	54
Koepke, Geo. H.	218	67
Koerber, Edward J.	222	78
Koestner, Paul A.	102	47
Kofmehl, Wm. J.	54	39
Kogan, Natalio	222	78
Kogut, Constantine S.	222	78
Koh, Nan Kyung	106	49
Kokeny, Wm. J.	126	53
Kokowicz, Raymond J.	222	78
Kolb, Fredk. E.	82	43
Kolesar, Robert C.	190	63
Kolman, Isadore I.	222	78
Koltay, Marta Szego	150	55
Koltay, Oscar P.	150	55
Koltonow, Lawrence	174	59
Komesu, Seiichi	70	42
Komisaruk, Richard	222	78
Kommel, Richard M.	126	53
Kondomerkos, John D.	222	78
Konopa, John F.	130	54
Konzen, Jon L.	218	67
Kooi, Kenneth A.	218	67
Kool, Bernard P.	106	49
Kools, Wm. C.	186	62
Koop, Chester S.	62	40
Kopchick, Jos.	94	45
Kopf, George M.	222	78
Kopmeyer, Joe M., Jr.	222	78
Kopp, Clemens M.	98	45
Koran, Valentine L.	222	78
Koren, Louis	222	78
Korhonen, Bert J.	106	49
Kornacki, Thomas E.	222	78
Kornmesser, James G.	174	59
Korpi, Steven	186	62
Korte, George J.	218	67

Name	County Code	Page
Korum, Lyle W.	222	78
Koschnitzke, H. K.	222	78
Kossayda, Adam W.	222	78
Kostoff, Harold R.	194	64
Koucky, Charles J.	190	63
Kovach, Emery P.	222	78
Kovacs, Geza	210	65
Kovacsi, Laszlo	22	36
Kovan, Dennis D.	222	78
Kovich, Eleanore	90	44
Kowaleski, Edward H.	142	54
Kowaleski, John J.	222	78
Kowals, Francis V.	190	63
Kozachik, Martin J.	94	45
Kozak, Jerome S.	90	44
Kozlinski, Anthony E.	222	78
Kozlow, Clifford S.	174	59
Kozlow, Louise E. A.	174	59
Kozonis, Michael C.	174	59
Kozora, Elmer J.	174	59
Kraai, Harm	106	49
Krabbenhoft, K. L.	222	78
Kraft, Lester C.	90	44
Kraft, Raymond B.	222	78
Kraft, Richard O.	218	67
Kraft, Ruth M.	222	78
Krakauer, Bernard	222	78
Kramer, Chas. G.	154	55
Krane, Mark	174	59
Krass, Edward W.	222	78
Kraus, John J.	222	78
Krausse, Chas. F.	218	67
Krawczyck, B.	10	35
Krawec, Charles J.	222	78
Krebs, Wm. T.	222	78
Krecke, Charles F.	106	49
Kreel, Boris W.	62	40
Kreinbring, Geo. E.	222	78
Kremski, John A.	154	55
Krenz, Marlin P.	162	56
Kresge, Bruce A.	174	59
Kretchmar, Arthur H.	62	40
Kretschmer, Thos. V.	190	63
Kretzschmar, John C.	222	78
Kreulen, Henry J.	106	49
Krevsky, David A.	222	78
Krevsky, Harold	222	78
Krhovsky, Frank J.	106	49
Krickstein, Herbert	218	67
Krieg, Earl G.	222	78
Krieger, Bruce	126	53
Krieger, Harley L.	222	78
Krieger, Harvey	222	78
Krieger, Ingeborg	222	78
Krieger, Norman N.	174	59
Krigbaum, Edward M.	218	67
Kripke, Morton J.	126	53
Kristen, Karl T.	222	78
Kritchman, Maurice J.	222	78
Kroha, Lawrence A.	222	78
Krohn, Don R.	174	59
Krohn, Lawrence H.	222	78
Kroll, H. Harvey V.	222	78
Kronschnabel, E. F.	134	54
Kroon, Joseph D.	126	53
Krull, Edward A.	106	49
Kruse, Wm. T., Jr.	106	49
Krynicki, Francis X.	222	78
Krystal, Henry	222	78
Kubanek, Jos. L.	222	78
Kube, Kenneth S.	86	43
Kucmierz, Francis S.	222	78
Kudner, Donald F.	98	45
Kuehn, Ned N.	222	78
Kuhel, Eli H.	174	59
Kuhn, Albert A.	222	78
Kuhn, Anne K.	174	59
Kuhn, Henry H.	222	78
Kuhn, Richard F.	222	78
Kuhn, Robert E.	174	59
Kuiper, K. V.	106	49
Kuipers, Siebe W.	186	62
Kujawski, Walter F.	222	78
Kulinski, Eugene J.	22	36
Kullman, Harold J.	222	78
Kumasaka, Glen H.	218	67
Kuntzman, Carl E.	126	53
Kuran, Lionel V.	222	78
Kurcz, Jos. A.	222	78
Kurnetz, Ruben	174	59
Kurtz, Hyman	126	53
Kurtz, Irvin J.	222	78
Kurtz, John J.	62	40
Kurtzman, Raymond S.	222	78
Kutcipal, R. A.	170	57
Kutsche, John D.	222	78
Kutsche, W. F.	14	35
Kvietys, Benjamin	222	78
Kwasiborski, S. A.	222	78
Kwass, Stephen K.	218	67
Kwast, Harold A.	154	55
Kyle, Wm. V., Jr.	222	78
Kypros, George P.	126	53
Laberge, James M.	222	78
Labes, James	222	78
La Bine, Alfred	82	43
Laboe, Edward W.	158	55
Labsan, H. F.	222	78
Lackey, Lawrence S.	222	78
La Core, Ivan A.	82	43
Lacroix, George E.	222	78
Ladd, James E.	174	59
Laderach, David C.	222	78
Lafata, Philip J.	222	78
La Ferte, Alfred D.	222	78
Laham, M. M.	222	78
Lahood, Michael J.	222	78
Lahti, Carl R.	182	61
Lahti, Paul T.	174	59
Laige, Raymond J.	222	78
Laird, James I.	62	40
Laird, Robert G.	106	49
Lajoie, Louis J.	222	78
Lakatos, George C.	222	78
Lake, Edward C.	98	45
Lake, Robert C.	222	78
Lakin, Alan C.	222	78
Lakin, Mervyn H.	222	78
Lakke, Gordon W.	34	38
Lakoff, Chas. B.	222	78
Lalime, Ruth E.	106	49
Lam, Conrad R.	222	78
Lam, Francis L.	34	38
Lamberson, Frank A.	222	78
Lambert, Alvin G.	174	59
Lambert, Leslie A.	22	36
Lambert, Warren C.	134	54
Lamberts, Austin E.	106	49
Lambie, John S.	174	59
Lammers, Gerald P.	158	55
Lammy, James V.	222	78
Lamont, Richard L.	222	78
Lamontagne, Gaetan	222	78
Lampe, Isadore	218	67
Lampman, Harold H.	222	78
Lanard, Francis W.	174	59
Lancaster, Vance B.	34	38
Lanczy, Tamas O.	82	43
Landers, James W.	174	59
Landers, Maurice B.	222	78
Landgraf, Robert L.	26	37
Landick, Robert E., Jr.	90	44
Landron, Danl.	98	45
Landry, Roy A.	174	59
Lane, Alexander Z.	218	67
Lang, Ernst F.	222	78
Lang, Ramon B.	106	49
Lange, Eugene W.	162	56
Lange, Philip F.	90	44
Lange, Wm. A.	222	78
Langin, John L.	22	36
Langston, John D.	222	78
Laning, Geo. M.	222	78
Lansing, Eugene H.	222	78
Lansky, Mandell	222	78
Lanting, Helen E. P.	90	44
Lanuti, Frank	34	38
Lapides, Jack	218	67
Laporte, Lawrence A.	126	53
Lapp, Charles	126	53
Large, Alfred M.	222	78
Largo, Donald J.	222	78
Larkey, Paul E.	90	44
Larkin, Duane R.	222	78
Larned, Richard I.	222	78
Larsen, Edward G.	222	78
Larson, Alvin R.	174	59
Larson, Chas. J.	222	78
Larson, Forrest W.	82	43
Larson, Francine S.	222	78
Larson, Homer I.	90	44
Larson, Walter E.	170	57
Larsson, Bror H.	222	78
Lasichak, Andrew G.	222	78
Lasley, James W.	222	78
Lasorsa, Armand M.	50	39
Lassignal, Jules C.	190	63
Latchaw, William R.	98	45
Latimer, Fredk. R.	222	78
Latteier, Karl K.	222	78
Lauppe, Edward H.	222	78
Lauppe, Fredk. A.	222	78
Laura, Albert L.	222	78
Laurel, Richard J.	62	40
Lauretti, Emil J.	162	56
Lauretti, L. A.	162	56
Lauridsen, James	194	64
Laurin, Vilda S.	162	56
Laurisin, Eugene	222	78
Lauter, Eric W.	222	78
Laux, Philip J., Jr.	174	59
Lauzun, Virginia D.	90	44
La Vielle, Carroll J.	62	40
Law, John L.	218	67
Lawand, Frank K.	222	78
Lawhead, Nixon R.	222	78
Lawrence, James O.	102	47
Lawrence, Louis F.	222	78
Lawson, James B.	102	47
Lawson, James M.	222	78
Lawson, John W.	222	78
Lawther, John	214	65
Lazar, Morton R.	222	78
Leach, Chas. A., Jr.	174	59
Leach, David	222	78
Leach, J. Leonidas	62	40
Leach, Robert B.	222	78
Leach, Russell E.	94	45
Leach, Wendell L.	222	78
Leacock, Robert C.	222	78
Leader, Luther R.	222	78
Leahy, Etta Link	174	59
Learned, David W.	26	37
Lease, Glenn O.	218	67
Leaver, L. Ross	222	78
Lebamoff, Alexander T.	222	78
Lebedovych, Emil	110	52
Lebedovych, Ksenia	110	52
Lechner, Monroe S.	222	78
Lecklider, A. F.	222	78
Ledger, Wm. J.	218	67
Ledrew, Frederick	34	38
Le Duc, Don M.	90	44
Lee, Edith J.	222	78

Name	County Code	Page
Lee, Frank	222	78
Lee, Fred	218	67
Lee, Hai Soon	26	37
Lee, Harry E.	222	78
Lee, Pyong Tai	222	78
Lee, Thomas E.	126	53
Leep, Jos. H.	106	49
Leeser, Robert L.	222	78
Le Fevre, Geo. L., Jr.	162	56
Le Fevre, Wm. M.	162	56
Le Galley, K. B.	194	64
Lehmann, Robert N.	222	78
Leichtman, R. R.	174	59
Leipsitz, Louis S.	222	78
Leitch, Robert M.	30	37
Leiter, Forrest C.	222	78
Leith, Dorothy L.	110	52
Leithauser, Danl. J.	222	78
Leland, Solomon	222	78
Lemen, Charles E.	70	42
Le Mieux, Leslie L.	62	40
Le Mire, Donald F.	50	39
Le Mire, William A.	50	39
Lemley, Clark F.	222	78
Lemmen, Lloyd J.	162	56
Lemmer, Richard A.	102	47
Lemmon, Chas. E.	222	78
Lemon, Bruce K.	222	78
Lentine, James J.	222	78
Lentini, Jos. R.	106	49
Lentini, Nicholas	170	57
Lentz, Conrad L.	222	78
Lenz, Chas. R., Jr.	98	45
Lenz, Willard R.	222	78
Lenzo, Joseph E.	222	78
Leonard, A. T.	162	56
Leopard, J. M.	14	35
Lepard, Cecil W.	222	78
Lepard, Olin L.	198	64
Lepisto, Victor E.	82	43
Lepley, Fred O.	222	78
Lepley, Frederick J.	222	78
Leppink, Richard A.	186	62
Lerman, Saml. I.	222	79
Lerner, A. Martin	222	79
Lerner, Leonard H.	222	79
Leroy, George V.	222	79
Lesesne, John M.	222	79
Leshock, Jos. C.	90	44
Leslie, C. G.	222	79
L'Esperance, Simon P.	222	79
Lessem, David	222	79
Lessien, Bruce T.	174	59
Lester, Melvin A.	222	79
Leszynski, Jos. S.	222	79
Leucutia, Traian	222	79
Leva, John B.	26	37
Levagood, Floyd B.	222	79
Levant, Arthur B.	222	79
Levenson, Malcolm L.	222	79
Leventer, Ira	222	79
Levett, Harry L.	90	44
Levi, Charles	126	53
Levick, Walter G.	222	79
Levin, David M.	222	79
Levin, Herbert G.	222	79
Levin, M. Mitchel	222	79
Levin, Murray B.	174	59
Levin, Saml. J.	222	79
Levine, Bernard	174	59
Levine, Edward E.	222	79
Levine, Mark C.	62	40
Levine, Robert S.	106	49
Levine, Sydney S.	222	79
Levitt, Irving	222	79
Levitt, Nathan	222	79
Levy, David B.	222	79
Levy, Jos., Jr.	34	38
Levy, Marvin B.	222	79
Levy, Stanley H.	222	79
Lewin, Harry	222	79
Lewis, Benjamin M.	222	79
Lewis, Billie	62	40
Lewis, Chas. T.	222	79
Lewis, Clayton, Jr.	90	44
Lewis, Elmore F.	98	45
Lewis, Geo. H.	106	49
Lewis, Harvey Y.	222	79
Lewis, J. Hugh	222	79
Lewis, Lee A.	222	79
Lewis, Robert H.	222	79
Lewis, Sol M.	174	59
Lewis, Thos. E.	62	40
Lewis, Vivian M.	62	40
Lewis, Welcome B.	34	38
Lewis, Wilfrid J.	222	79
Lexmond, M. J.	134	54
Le Zotte, Lloyd A.	98	45
Libbrecht, Robert V.	222	79
Libke, Robert S.	150	55
Licht, Robert	222	79
Lichter, Max L.	222	79
Lichtwardt, Harry E.	174	59
Lichtwardt, John R.	174	59
Lichty, Dorman E.	222	79
Licker, Reuben R.	194	64
Liddicoat, Arthur G.	222	79
Lie, Kim K.	222	79
Lieber, Robert W.	62	40
Lieberman, Barnard L.	222	79
Lieberthal, M. J.	66	41
Lieberthal, Paul R.	66	41
Liedel, Warren J.	158	55
Lieding, Keith G.	70	42
Lieffers, Harry	106	49
Lievois, Edward G.	174	59
Light, Richard U.	102	47
Lightbody, James	222	79
Lightfoot, Arthur S.	62	40
Lignell, John H.	170	57
Lignell, Rudolph W.	222	79
Liioi, Joseph A.	222	79
Lilly, Isaac S.	94	45
Lilly, Richard J.	174	59
Lilly, Robert P.	222	79
Limbach, David R.	62	40
Limia, Antonio G.	174	59
Lincer, William T.	106	49
Lincke, E. T.	134	54
Lincoln, Norman V.	142	54
Linden, Victor E.	98	45
Lindenauer, S. M.	218	67
Lindenfeld, Fredk. H.	26	37
Lindman, Thomas C.	62	40
Lindner, David W.	222	79
Lindquist, Norman L.	50	39
Ling, Kenneth C.	190	63
Ling, Theodore W.	174	59
Lininger, Richard E.	26	37
Linkner, Leonard S.	222	79
Linn, Frank	26	37
Linn, Herman J.	174	59
Linn, Michael R.	74	42
Linnell, Paul C.	90	44
Linsenmann, Karl W.	154	55
Lipinski, Stanley L.	222	79
Lipkin, Ezra	222	79
Lipnik, Carl E.	222	79
Lipnik, Morris J.	222	79
Lipschutz, Louis S.	222	79
Lipsey, Donald	206	64
Lipski, John G.	14	35
Lipson, Channing T.	222	79
Lipson, Madeleine L.	222	79
Lipton, Raymond F.	222	79
List, Carl F.	106	49
Litsky, Abraham D.	222	79
Littig, John D.	102	47
Little, James W.	222	7
Littlejohn, P. M.	102	4
Litwin, Jack A.	222	7
Litzenberger, D. J.	222	7
Litzenburger, A. F.	170	5
Livesay, Jackson E.	62	4
Livingood, Clarence S.	222	7
Livingston, W. C.	222	7
Llaneza, Onofre B.	126	5
Llinas, Jose J.	90	4
Lloyd, James R.	222	7
Lo, Lien Fu	222	7
Lo, Molly Tan	222	7
Loan, G. B.	158	5
Lobbes, Kenneth E.	106	4
Locey, Robert P.	26	3
Locke, Francis A.	114	5
Locken, Gail Ann	218	6
Lockett, Harold J.	218	6
Lockhart, Edward C.	222	7
Locklin, W. Kaye	102	4
Lockwood, Bruce C.	222	7
Loder, Leonel L.	162	5
Lofdahl, Stewart	18	3
Lofstrom, James E.	222	7
Logan, Wesley G.	18	3
Logie, James W.	106	4
Lo Grippo, Annie B.	222	7
Lohmann, Carl W.	222	7
Lohr, Oliver W.	190	6
Lohr, Thos O.	190	6
London, Berton L.	222	7
Long, Chas. O., Jr.	90	4
Long, Earl C.	222	7
Long, Edgar C.	158	5
Long, John J.	222	7
Long, Walter B.	34	3
Longo, Salvatore	222	7
Longyear, Harold W.	174	5
Loomis, Frank J.	214	6
Loomis, John L.	222	7
Loomus, Gerald N.	222	7
Lopatin, Reuben	222	7
Loranger, C. B. P.	222	7
Loranger, Guy L.	222	7
Lorber, Jos. H.	222	7
Loree, Joseph	22	3
Loree, Maurice C.	90	4
Lorentzen, Edwin H.	222	7
Lossman, Robert T.	70	4
Loughrin, Therion D.	90	4
Louisell, James M.	102	4
Loupee, Geo. E.	38	3
Loupee, Sherman L.	38	3
Lovas, Wm. S.	222	7
Love, Donald M.	222	7
Love, James M.	222	7
Love, Neil W.	190	6
Lovell, Robert G.	218	6
Lovoll, Kaare	90	4
Lowe, Adolf W.	222	7
Lowe, Kenneth H.	34	3
Lowe, Stanley T.	34	3
Lowe, W. Carter	102	4
Lowell, James W.	174	5
Lowery, Anthony J.	174	5
Lowinger, Paul L.	222	7
Lowney, Edmund D.	218	6
Lowrey, George H.	218	6
Lowrie, Wm. L.	222	7
Lowry, Claud M.	218	6
Lowry, Robert A.	162	5
Lovnd, James W., II	102	4
Lubavs, Konrads V.	102	4
Lubera, Richard J.	126	5
Lublin, Ann	126	5
Luby, Elliot D.	222	7
Lucas, Alexander R.	218	6
Lucas, Robert J.	222	7

ame	County Code	Page
ucas, Thos. A.	90	44
uck, Clyde A., Jr.	222	79
udlum, Lewis C.	90	44
udwig, Claude A.	194	64
udwig, Fredk. E.	194	64
ugg, Robert M.	194	64
ui, Alfred H. F.	222	79
ukas, John R.	222	79
ukens, Jack G.	106	49
umpkin, John G., Jr.	222	79
und, C. A. E.	34	38
undeen, John G.	18	35
undeen, Richard M.	62	40
upovitch, Aaron	174	59
urie, Robert I.	190	63
usher, William T.	158	55
usis, Alexsandrs	74	42
usk, John A.	62	40
ussos, Athanasios S.	174	59
utes, Byron B.	174	59
utz, Earl F.	222	79
utz, Sherwin J.	222	79
uz, Denis A.	222	79
uzadre, John H.	222	79
ynk, Stanley M.	110	52
ynn, David H.	222	79
ynn, Harvey D.	222	79
yons, James W.	134	54
yons, Robert T.	174	59
ytle, Robert P.	222	79
yttle, Sydney N.	62	40
aas, Gerald I.	98	45
aben, Hayward C., Jr.	222	79
abley, John D.	222	79
ac Craken, F. L.	222	79
ae Donald M. A.	102	47
ac Donell, James A.	106	49
ac Dougall, Orrin P.	222	79
acfarlane, Howard W.	222	79
acgregor, Delbert M.	62	40
ac Gregor, John F.	206	64
ac Gregor, Wm. W.	222	79
achin, Harold A.	102	47
acias, Rafael	26	37
ac Intyre, Dugald S.	106	49
ack, Harold C.	222	79
ack, Robert E.	222	79
ac Kenzie, Earle D.	222	79
ac Kenzie, John W.	222	79
ac Kenzie, John Wm.	62	40
ackersie, Wm. G.	222	79
ackie, Thos. B.	42	38
acksood, Albert J.	62	40
acksood, Jos. A.	62	40
acksood, William E.	62	40
ac Lean, Lloyd R.	98	45
ac Leod, Charles W.	222	79
acmillan, Francis B.	222	79
ac Neal, John A.	78	43
acneil, John J.	222	79
acphail, Albert A.	62	40
ac Pherson, K. C.	222	79
ac Queen, Malcolm D.	222	79
ac Rae, Leonard D.	22	36
ac Vicar, James E.	102	47
aczewski, John E.	222	79
ader, Ivan J.	222	79
agee, Kenneth R.	218	67
agielski, John E.	218	67
agnell, Ralph C.	222	79
agnuson, Harold J.	218	67
agoon, Duncan J. J.	218	67
aguire, Andrew J.	126	53
aguire, Clarence E.	222	79
ahan, James E.	10	35
ahaney, Robert C.	186	62

Name	County Code	Page
Mahaney, Thos. P.	190	63
Mahanti, Biresh, C.	222	79
Maher, James T.	106	49
Mahlin, Murray S.	222	79
Mahoney, Hugh M.	222	79
Maibauer, Fredk. P.	222	79
Mainwaring, Rosser L.	222	79
Mainzer, Jacob	222	79
Maire, Edward D.	222	79
Maire, Lewis E.	162	56
Maisel, Harry	222	79
Maitland, Ruth J.	222	79
Majauskas, V. E.	222	79
Majzoub, Ahmad J.	222	79
Malcolm, Henry E.	90	44
Malcolm, Karl D.	218	67
Maldonado, W. E.	90	44
Maley, John E.	218	67
Malina, Stephen	222	79
Malje, Frank J.	222	79
Mall, John C.	218	67
Malone, James G.	102	47
Malone, John M.	222	79
Malone, Robert E.	222	79
Maloney, John A.	222	79
Maloney, Philip J.	222	79
Maltzer, Jos. H.	222	79
Mammel, Bernard T.	222	79
Mancewicz, Jerome F.	106	49
Mancuso, Vincent S.	222	79
Mandel, Leslie	222	79
Mandelbaum, B.	222	79
Mandell, Gerald H.	222	79
Mandeville, C. B.	162	56
Mandiberg, Jack N.	222	80
Mangelsdorf, Carl H.	62	40
Maniaci, George	50	39
Mankani, Hari B.	190	63
Mann, Andrew D.	222	80
Mann, Jos. D.	106	49
Mannausa, L. R.	90	44
Manning, John E.	190	63
Manning, John T.	26	37
Manning, John W., III	190	63
Manning, Morey H.	222	80
Manwaring, John T.	62	40
Manz, Howard N.	174	59
Maples, Douglas E.	162	56
Mapletoft, Kenneth E.	222	80
Marcotte, Oliver J.	174	59
Marcotty, Andreas	222	80
Marcus, Edwin L.	222	80
Marecki, Vincent J.	222	80
Margolis, Fredk. J.	102	47
Margolis, Marvin O.	222	80
Margules, Saul Z.	222	80
Margulis, Ralph R.	174	59
Marinelli, Ralph	126	53
Marinus, Carleton J.	222	80
Mark, Hansi	126	53
Mark, Jerome	222	80
Markey, Alexander P.	222	80
Markey, Francis L.	190	63
Markey, Frank R.	222	80
Markey, Jos. P.	190	63
Markham, Thomas N.	218	67
Markley, John M.	174	59
Markoe, Rupert C. L.	222	80
Marks, Ben	222	80
Marks, Bert W.	222	80
Marks, V. A.	154	55
Markunas, Paul J.	62	40
Maroko, Simon W.	174	59
Marra, John J.	174	59
Marrs, Jack Winton	162	56
Marsa, Percy S.	174	59
Marsh, Alton R.	222	80
Marsh, John P.	106	49
Marsh, Roland G. B.	114	52

Name	County Code	Page
Marshall, Don	102	47
Marshall, James R.	222	80
Marshall, James R., Jr.	222	80
Marshall, Mark	218	67
Marshall, Robert B.	106	50
Marshall, Wm. P.	102	47
Marston, Leo L.	94	45
Marta, John B.	90	44
Martel, William	218	67
Martens, Irvin J.	102	47
Martin, Donald W.	174	59
Martin, Donald W.	218	67
Martin, Francis A.	174	59
Martin, Jack F.	190	63
Martin, James A.	62	40
Martin, J. B., Jr.	222	80
Martin, Lyndle R.	222	80
Martin, Peter A.	222	80
Martin, Robert G.	170	57
Martin, Walter	222	80
Martin, Wayne O.	90	44
Martin, Wilbur C.	222	80
Martin, Wm. L.	126	53
Martin, Wm. S.	138	54
Martinez, Alvaro	222	80
Martinez, Pedro O.	222	80
Martinus, Martin	106	50
Martmer, Edgar E.	222	80
Martzowka, Wm. P.	190	63
Marwil, Thos. B.	222	80
Marvin, John A.	106	50
Marvin, Robert C.	222	80
Marzolf, M. Finette	90	44
Mascarin, T. A.	222	80
Mason, Joyce W.	218	67
Mason, Robert J.	174	59
Mason, Stephen C., III	218	67
Mason, Warren B.	106	50
Mason, Wm. G.	190	63
Masters, Brooker L.	166	57
Maternowski, C. J.	106	50
Mateskon, Victor S.	170	57
Mathews, Kenneth P.	218	67
Mathias, Berton J.	62	40
Mathis, Perry L.	222	80
Mathura, G. R.	174	59
Mattes, Max W.	126	53
Matthews, Burton V.	222	80
Matthews, C., Jr.	126	53
Matthews, Harry C.	190	63
Matthews, Norman L.	134	54
Matthews, R. W.	58	39
Mattman, Paul E.	222	80
Mattson, H. Frazyer	78	43
Mattson, Theo M.	222	80
Mauch, Eugene W.	222	80
Maurer, James J.	34	38
Maurer, John A.	190	63
Mauthe, Harry G.	222	80
Mavromatis, E.	90	44
Mavromatis, F.	90	44
Maxim, Edward S.	126	53
Maxwell, John A.	218	67
May, Donald G.	102	47
May, Louis E.	118	52
May, Stephen G.	90	44
Maycroft, T. C.	106	50
Mayer, Gerry	138	54
Mayer, Mary L.	126	53
Mayhew, Harry E.	194	64
Maynard, Fredk. M.	222	80
Maynard, Mason S.	106	50
Maynard, Wm. A.	154	55
Mayne, Frederick C.	170	57
Mayne, Harold E.	190	63
Mayne, John C.	22	36
Mayo, W. E. Barry	174	59
Mayor, Raymond L.	174	59
Mays, James D.	106	50

Name	*County Code*	*Page*
Mays, William O.	222	80
McAlindon, J. D.	62	40
McAlonan, Wm. T.	222	80
McAlpine, Gordon S.	222	80
McArthur, Peter A.	186	62
McArthur, Stewart C.	74	42
McBride, John R.	110	52
McBryan, Thos. J.	222	80
McBryde, Lyman M.	42	38
McCadie, James H.	222	80
McCain, French H.	174	59
McCall, Marion G.	222	80
McCandless, Virginia	222	80
McCandliss, Donald H.	174	59
McCarthy, James H.	102	47
McCarthy, Jos. S.	102	47
McCaughey, R. S.	222	80
McClay, Adam C.	70	42
McClellan, Junius W.	62	40
McClellan, Robert J.	222	80
McClelland, Rachel L.	222	80
McClendon, James J.	222	80
McClintock, John J.	222	80
McClure, Robert W.	222	80
McClure, Wm. R.	222	80
McCole, C. E.	222	80
McColl, Chas. W.	222	80
McColl, Clarke M.	222	80
McColl, Duncan J.	194	64
McColl, John A.	102	47
McCollum, E. Bert	222	80
McConkie, James P.	174	60
McConnell, Richard R.	102	47
McCord, Carey P.	222	80
McCormick, Colin C.	222	80
McCormick, Harry	194	64
McCormick, John K.	106	50
McCorvie, C. Ray	90	44
McCorvie, Donald R.	90	44
McCrea, John W.	202	64
McCuaig, Alfred G.	34	38
McCubbrey, David R.	218	67
McCue, Francis B.	222	80
McCullough, L. E.	222	80
McCullough, W. L.	170	57
McDermott, J. F., Jr.	218	67
McDonald, Angus L.	222	80
McDonald, John R.	222	80
McDonald, Robert J.	174	60
McDonald, Wm. G.	222	80
McDougal, Wm. J.	106	50
McEachern, Thos. H.	218	67
McEachran, Hugh D.	54	39
McElmurry, Leland R.	90	44
McElroy, William J., Jr.	174	60
McEnroe, John E.	170	57
McEvitt, Wm. G.	222	80
McEvoy, Francis J.	174	60
McEwen, Wm. G.	190	63
McFarlane, Donald R.	90	44
McGarry, Roy A.	62	40
McGarvey, Wm. E.	98	46
McGee, Harry B.	22	36
McGee, John W.	34	38
McGee, Peter L.	22	36
McGee, T. Manford	222	80
McGeehan, J. S.	206	64
McGeoch, Reginald W.	158	55
McGillicuddy, O. B.	90	44
McGillicuddy, R. J.	90	44
McGillicuddy, W. E.	222	80
McGinnis, Kenneth D.	222	80
McGinty, John D.	126	53
McGlaughlin, N. D.	222	80
McGough, Jos. M.	222	80
McGrae, John D., Jr.	62	40
McGregor, Allan R.	62	40
McGuire, John F.	222	80
McGunegle, Keate T.	202	64
McHenry, John T.	222	80
McHenry, Martin	222	80
McHugh, James M.	174	60
McInerney, Thos. A.	50	39
McInerney, Thos S.	174	60
McIntosh, Robert D.	222	80
McIntyre, Jack B.	174	60
McIntyre, Wm. B.	222	80
McKay, Orval I.	106	50
McKean, G. Thos.	222	80
McKeever, Geo. E.	222	80
McKenna, Chas, J.	222	80
McKenney, Marvin J.	90	44
McKinlay, Leland M.	106	50
McKinney, Roy J.	222	80
McKnight, Edwin R.	206	64
McKnight, Robert D.	170	57
McKnight, Robert E.	222	80
McLane, Harriet I.	222	80
McLaughlin, J. H.	174	60
McLaughlin, John M.	98	46
McLaughlin, Miar J.	98	46
McLaurin, Jasper E.	222	80
McLauthlin, H. B.	98	46
McLean, Brita R.	222	80
McLean, Don W.	222	80
McLean, Donald C.	222	80
McLean, James A.	218	67
McLelland, J. T.	26	37
McLeod, Kenneth W. A.	62	40
McManus, T. M.	214	65
McMillin, John H.	158	56
McMorrow, Kathryn	126	53
McMurray, Richard J.	62	40
McNair, John N.	162	56
McNamara, Joseph M.	222	80
McNaughton, D. W.	62	40
McNeill, Howard H.	174	60
McNeill, Roger F.	222	80
McNichol, L. J.	222	80
McPhee, Edward C.	174	60
McPhee, Malcolm	218	67
McPhee, Roderick T.	222	80
McQuiggan, Mark C.	222	80
McQuiggan, Mark R.	222	80
McQuillan, F. P.	98	46
McSherry, Leo B., Jr.	22	36
McTaggart, David	62	40
McWhirter, W. W.	174	60
McWilliams, John R.	218	67
Meade, Richard H., Jr.	106	50
Meade, Wm. H.	90	44
Meadows, Joseph M., Jr.	218	67
Meads, Jason B.	98	46
Medalie, Morris	222	80
Medema, Paul E.	162	56
Medford, Lester	66	41
Medill, Wilbur C.	10	35
Medlar, Robert E.	98	46
Medvezky, Michael J.	22	36
Meek, Stuart F.	222	80
Meeks, Louis W.	218	67
Meengs, Marvin B.	162	56
Meeuwsen, Bernard	186	62
Meghnot, Parviz	222	80
Megler, Mihael A.	174	60
Mehas, Constantine P.	174	60
Mehney, Gayle H.	106	50
Mehrabian, Edw. E.	174	60
Meier, Harold J.	30	37
Meier, Maurice D.	82	43
Meier, Walter A.	158	56
Meils, Richard K.	174	60
Meinke, Albert H., Jr.	58	39
Meinke, Richard K.	90	44
Meisel, Edward H., Jr.	154	55
Meisner, Harry E.	174	60
Melander, L. W., Jr.	222	80
Melges, Fredk. J.	34	38
Melick, Richard C.	90	44
Mellen, Hyman S.	222	80
Mellinger, Raymond C.	222	80
Mellis, Richard	102	47
Melnik, Maxim P.	222	80
Melnyczuk, Nestor	222	80
Menagh, Frank R.	222	80
Menezer, Richard	126	53
Mendelson, Herbert	222	80
Mendelssohn, Reuben J.	222	80
Mendians, Edgar V.	222	80
Mendoza, Saml.	222	80
Mendrek, H. H.	62	40
Menge, Michael .S	174	60
Menton, Norman J.	222	80
Merametdjian, Krikor	126	53
Mercader, Rodolfo S.	222	80
Mercer, Frank A.	174	60
Mercer, Walter E.	90	44
Merchun, Frank A.	94	45
Merkel, Chas. C.	222	80
Merkle, Karl	222	80
Merlo, Frank A.	142	54
Merrill, C. R., Jr.	222	80
Merrill, Elmer H.	210	65
Merriman, Richard C.	102	47
Merritt, Earl G.	222	80
Merritt, Jule J.	126	53
Mersky, Charlotte I.	222	80
Mertaugh, Wm. F.	42	38
Mertz, Joanne E.	170	57
Merz, Walter L.	206	64
Mesaros, Michael P.	154	55
Mesirow, Stanley M.	26	37
Messenger, A. L.	90	44
Messmer, Harold O.	126	53
Metes, John S.	222	80
Metzger, Harry C.	222	80
Mevorah, Barukh L.	174	60
Meyer, Edwin G.	74	42
Meyer, Eugene	222	80
Meyer, Henry J.	190	63
Meyer, John S.	222	80
Meyer, Judith L.	106	50
Meyer, Kenneth R.	222	80
Meyers, Marjorie P.	222	80
Meyers, Maurice P.	222	80
Meyers, Sidney S.	126	53
Meza, Pedro	194	64
Michael, Michael J.	222	80
Michael, Sidney R.	62	40
Michael, Stanley L.	70	42
Michels, Robert M.	62	40
Michelson, Richard B.	62	40
Middleton, David H.	218	67
Middleton, W. S.	158	56
Miedler, Leo J.	218	67
Migdoll, David	222	80
Mihay, Benjamin	222	80
Mikan, V. Robert	190	63
Mikesell, W. B., Jr.	222	80
Mikhail, George	222	80
Milad, Anis A.	222	80
Mileris, Vytautas	222	80
Miles, Edward J.	210	65
Milford, A. F., Jr.	218	67
Milgrom, Sidney	174	60
Millard, David	214	65
Millard, Glenn E.	222	80
Millard, James A.	106	50
Miller, Antonina	222	80
Miller, Arthur C.	174	60
Miller, Chas. G.	198	64
Miller, Danl. H.	222	80
Miller, Edwin C.	22	36
Miller, Elmer B.	222	80
Miller, Ernest B.	130	54
Miller, George W.	222	80
Miller, Glenn F.	190	63

Name	*County Code*	*Page*
Miller, Hazen L.	174	60
Miller, Hubert	174	60
Miller, Ira I.	218	67
Miller, Irving M.	174	60
Miller, Jacob J.	222	80
Miller, John J.	106	50
Miller, J. Martin	222	80
Miller, John M.	194	64
Miller, J. D.	106	50
Miller, J. Thomas	90	44
Miller, Karl L.	222	80
Miller, Kenneth C.	10	35
Miller, Loren E.	62	40
Miller, Myron H.	222	80
Miller, Norman F.	218	67
Miller, Oscar W.	222	80
Miller, P. Lynford	114	52
Miller, Phillip L.	162	56
Miller, Sidney	174	60
Miller, Sidney S.	126	53
Miller, Theo. P.	106	50
Miller, Thos. H.	222	80
Miller, Willard J.	90	44
Miller, Wm. E.	222	80
Miller, William J.	222	80
Milliken, John G.	70	42
Mills, Clinton C.	222	80
Mills, Geo. R.	222	80
Mills, Georgia	150	55
Miltich, Anthony J.	62	40
Milton, Saml. B.	222	80
Mimura, James T.	174	60
Mines, Robert E., Jr.	222	80
Minster, John J.	74	42
Mintz, Edward I.	222	80
Mintz, Morris J.	222	80
Minui, Morteza	222	80
Mirkil, V. Jerome	90	44
Mishelevich, Sophie	222	80
Miskinis, Martyna	222	80
Missavage, Edward, Jr.	222	80
Mitchell, A. W.	222	80
Mitchell, C. Leslie	222	80
Mitchell, Darnell P.	222	80
Mitchell, Harold C.	94	45
Mitchell, Roy A.	222	80
Moberg, Carl H.	106	50
Moe, Carl R.	102	47
Moehlig, Robert C.	222	80
Moeller, Arlyn	22	36
Moeller, Jan C.	62	41
Moen, Cornetta G.	106	50
Moench, G. Fredk.	154	55
Moerdyk, Wm. J.	186	62
Moghissi, Kamran S.	222	81
Mogill, Geo.	222	81
Mohney, Glenn E.	194	64
Moisides, Vasil P.	222	81
Moleski, Joseph V.	106	50
Moleski, Leo T.	106	50
Moleski, Stanley L.	106	50
Moleski, Walter L.	106	50
Molina Pung, Elba	90	44
Moll, Arthur M.	106	50
Moll, Clarence D.	222	81
Mollmann, Arthur H.	106	50
Molnar, Stephen K.	222	81
Molner, Jos. G.	222	81
Moloney, James C.	174	60
Molony, Basil A.	102	47
Momcilovich, Boxidar	222	81
Mond, Edward	222	81
Monfort, Robert N.	90	44
Monson, Robert C.	222	81
Montante, Jos. R.	222	81
Montenegro, Milton	222	81
Montgomery, Benj. T.	42	38
Montgomery, John C.	106	50
Montgomery, William C.	222	81
Monto, Raymond W.	222	81
Mooi, Henry R.	30	37
Moon, A. Raymond	190	63
Moon, Wm. W.	226	68
Mooney, James C.	190	63
Moore, Allen B.	22	36
Moore, Charles R.	90	44
Moore, Donald B.	90	44
Moore, Douglas P.	106	50
Moore, Geo. F.	126	53
Moore, Glenn E.	62	41
Moore, Hugh R.	166	57
Moore, John W., Jr.	222	81
Moore, Neal R.	22	36
Moore, Phillip J.	206	64
Moore, T. Scott	26	37
Moore, Warren R.	222	81
Moore, Wesley P.	62	41
Mopper, Coleman	222	81
Morales, Miriam V.	222	81
Moran, Frank J.	222	81
Morand, Louis J.	222	81
Morelli, Lorenzo	98	46
Moreno, Jose	222	81
Morey, Edward C.	106	50
Morgan, Alan L.	62	41
Morgan, Dale K.	214	65
Morgan, Donald N.	222	81
Morgan, Philip J.	222	81
Morgrette, Leonard J.	190	63
Moriarty, Geo. J.	222	81
Morin, Leonard A.	174	60
Morin, Paul	62	41
Morin, Richard	206	64
Morita, Yoshikazu	222	81
Morley, Arthur R.	222	81
Morley, George M.	222	81
Morley, George W.	218	67
Morley, Harold V.	222	81
Morley, James A.	222	81
Moroun, Sheffick J.	222	81
Morovitz, John E.	206	64
Morrill, Charles E.	18	35
Morris, Alvin N.	194	64
Morris, Gerald W.	126	53
Morris, Harold L.	222	81
Morris, Joe D.	218	67
Morrison, Donald B.	34	38
Morrison, George W.	222	81
Morrissey, Vaughn H.	62	41
Morrow, Robert J.	90	44
Morrow, Wm. J.	138	54
Morse, William H.	222	81
Morter, Roy A.	102	47
Morton, David G.	222	81
Moseley, Fredk. L.	222	81
Mosen, Max M.	222	81
Moser, Peter F.	222	81
Moses, John W.	222	81
Mosier, Dwight J.	22	36
Mosier, Edward C.	62	41
Moss, Ervin B.	222	81
Moss, Harvey L.	30	37
Moss, Nathan H.	222	81
Moss, Norman D.	222	81
Moss, Selma S.	222	81
Mott, Carlin P.	222	81
Mouw, Dirk R.	106	50
Moyer, Carl A.	82	43
Moynihan, John W.	222	81
Moyyad, John	218	67
Mozen, Herschel E.	222	81
Mucasey, John	222	81
Mudd, Richard D.	190	63
Mudge, Thomas J.	134	54
Mudge, Wm. A.	134	54
Mueller, Elmer J.	174	60
Mueller, Willys F.	62	41
Muhich, Ralph A.	98	46
Muir, Neil	202	64
Mulder, G. Arthur	106	50
Mulder, Lambertus	162	56
Muldoon, James P.	106	50
Mulhern, Donal T.	190	63
Mullaney, J. M., Jr.	86	43
Mullen, Jos. R.	222	81
Mullen, Warren R.	178	61
Mullenmeister, H. F.	34	38
Mulligan, Philip T.	126	53
Mumby, Clinton J.	174	60
Munro, Colin D.	98	46
Munro, Nathan D.	98	46
Munson, Harry L.	174	60
Munson, Henry T.	222	81
Murdy, Robert C.	102	47
Murguz, Atalay M.	174	60
Murillo, Casmir	34	38
Murphy, Albert P.	190	63
Murphy, Bernard M.	98	46
Murphy, Donald J.	222	81
Murphy, E. Grant	62	41
Murphy, Miles J.	106	50
Murphy, Percy J.	66	41
Murphy, Richard T.	190	63
Murphy, Scipio G.	222	81
Murray, Gordon M.	222	81
Murray, Ian H. L.	222	81
Murray, Kenneth W.	174	60
Murray, Morris J.	190	63
Murray, Robert J.	222	81
Murray, Thomas H.	222	81
Murray, Wm. A.	218	67
Musick, Gordon S.	174	60
Muske, Paul H.	222	81
Myers, Albert W.	58	39
Myers, Danl. W.	222	81
Myers, Thos. W.	18	35
Nagler, Donald F.	74	42
Naglins, Jekabs	94	45
Nahigian, Russell	222	81
Nahn, Charles E.	106	50
Nahoum, Antoine	222	81
Nakfoor, Eugene C.	90	44
Nalbandian, Robert M.	174	60
Nalepa, Eugene J.	174	60
Namtze, Chan	26	37
Nance, Marion E.	126	53
Nanjappachani	174	60
Nanzig, Reinard P.	106	50
Narotzky, Archie S.	134	54
Nash, Edward B.	222	81
Nassar, S. H.	62	41
Nathanson, Milton L.	174	60
Naud, Henry J.	222	81
Naud, Joseph H.	222	81
Navori, Cornelius A.	222	81
Naylor, Arthur H.	222	81
Naz, John F.	174	60
Neeb, Walter G.	222	81
Neering, James C.	90	44
Neerken, Adrian J.	102	47
Nehra, John M.	222	81
Neill, Edwin J.	222	81
Neiswander, Paul L.	174	60
Nelson, Darwin M.	222	81
Nelson, Harry M.	222	81
Nelson, Lorenzo R.	142	54
Nelson, Norman A.	222	81
Nelson, Oscar A.	190	63
Nelson, Roger B.	218	67
Nelson, Victor E.	222	81
Neruda, Fred	194	64
Nesbit, Reed M.	218	67
Nesbit, Warren S.	222	81
Nesbitt, Wm. E.	14	35
Nessel, Jack H.	174	60

Name	*County Code*	*Page*
Netreba, Jules L.	222	81
Nettleman, Wm. E.	30	37
Netzel, Robert J.	174	60
Neufeld, Paul N.	222	81
Neuman, John R.	90	44
Newby, Burns G.	174	60
Newcomb, Arnold B.	174	60
Newell, Wilson G.	134	54
Newitt, A. W.	90	44
Newman, Ernest	222	81
Newman, George F.	222	81
Newman, Harry S.	62	41
Newman, Max K.	222	81
Newman, Roy E.	14	35
Newton, Barabas	62	41
Newton, Chas. W., Jr.	218	67
Newton, John P.	106	50
Newton, Kenneth	222	81
Newton, Nicholas	222	81
Newton, Ray E.	98	46
Nichamin, Samuel J.	174	60
Nicholas, Mildred V.	90	44
Nicholls, Wm. W.	62	41
Nichols, Don H.	98	46
Nichols, Richard D.	218	67
Nichols, Wallace, Jr.	222	81
Nicholson, Robert M.	102	47
Nickel, Kenneth G.	106	50
Nickel, Warren O.	222	81
Nickels, Albert W.	222	81
Nickels, Mervyn M.	70	42
Nickerson, Ivey D.	174	60
Niederluecke, D. C.	174	60
Niekamp, Harold	98	46
Nielsen, Aage E.	222	81
Nielsen, Donald R.	222	81
Niemi, Osmo	134	54
Nigg, Herbert L.	210	65
Nigro, Norman D.	222	81
Niland, Paul T.	90	44
Nill, John B.	222	81
Nill, Wm. F.	222	81
Nitz, Donald A.	62	41
Nixon, John C.	218	67
Noah, Melvin L.	18	35
Nobel, Rudolf E.	218	67
Noble, Paul R.	190	63
Noble, Wm. C.	222	81
Nol, Edward A.	174	60
Nolan, Bernard E.	222	81
Nolting, Wilfred S. H.	222	81
Noordhoff, M. Samuel	106	50
Nora, James C.	54	39
Norgan, Anne F.	34	38
Northcross, David C.	222	81
Northouse, Peter B.	106	50
Northway, Robert O.	190	63
Norton, Arthur B.	222	81
Norton, R. C.	226	68
Nosanchuk, Jos. I.	174	60
Noshay, Wm. C.	222	81
Notier, Victor A.	106	50
Novack, Richard L.	222	81
Novak, Walter S.	194	64
Novy, Frank O.	190	63
Novy, Robert L.	222	81
Nowosielski, P. F.	222	81
Nunn, James W.	174	60
Nutting, Helen M.	126	53
Nwokedi, C.	222	81
Nyboer, Jan	222	81
Nyboer, Victor J.	222	81
Nykamp, Russel R.	186	62
Oakes, Chas. W., Jr.	86	43
Oakes, Robert W.	86	43
Oates, Saml. M.	106	50

Name	*County Code*	*Page*
O'Brien, Geo. M.	222	81
O'Brien, James D.	106	50
Ocamb, Harold D.	114	52
Ochsner, Paul J.	90	44
O'Connor, Archie R.	114	52
O'Connor, Gerald A.	218	67
O'Gonnor, Katheryn L.	222	81
O'Connor, Patricia	218	67
O'Dell, Charles W.	198	64
O'Dell, F. C., Jr.	14	35
O'Dell, John H., Jr.	198	64
Oden, C. L. A.	162	56
Odle, Ira D.	62	41
O'Donnell, Charles H.	174	60
O'Donnell, Dayton H.	222	81
O'Donovan, C. J.	102	47
O'Driscoll, Wm. G.	106	50
Oetting, Edward M.	222	81
O'Gawa, Gilbert M.	222	81
Ohmart, Bruce R.	218	67
Ohmart, Galen B.	222	81
O'Hora, Bernard A.	154	55
Ohorodnik, Julius M.	222	81
Ojeda, Pedro	90	44
O'Keefe, N. Thomas	218	67
Okun, Milton H.	222	81
Olariu, John	218	67
Oldford, Joseph R.	222	81
Oldham, Earle S.	134	54
Oldt, Mary Ruth	62	41
Olejniczak, Stanley	222	81
Oleksy, Stanley P.	98	46
Olen, Alex	222	81
O'Linn, Francis P.	222	81
Oliphant, Wm. W.	174	60
Olmsted, Geo. S.	222	81
Olmsted, Kenneth L.	30	37
Olney, Frank	198	64
Olsen, Bruce C.	94	45
Olsen, Lloyd L.	98	46
Olsen, Richard E.	174	64
Olsen, William R.	218	67
Olson, Avis M.	222	81
Olson, Carl J.	50	39
Olson, Carl P.	190	63
Olson, Donald T.	222	81
Olson, George P.	222	81
Olson, James A.	222	81
Olson, Nels R.	218	67
Olson, Robt. C.	146	55
Olson, Walter R.	134	54
O'Malley, R. J.	94	45
O'Neal, Robert M.	218	67
O'Neill, James A.	174	60
O'Neill, John W.	166	57
Oppenheim, Jos. M.	222	81
Oppy, Charles L.	150	55
Orders, Richard L.	106	50
Ormond, John K.	174	60
Ormond, Robt. S.	222	81
Ornstein, Chas.	126	53
O'Rourke, Paul V.	222	81
O'Rourke, Randall M.	222	81
Orr, John W.	62	41
Ortiz, Armando	222	81
Ortwig, Ralph W.	106	50
O'Shee, Vincent	126	53
Osher, Seymour L.	62	41
Osius, Eugene A.	222	81
Osland, Richard R.	162	56
Oster, Harold L.	98	46
Ostrander, L. D., Jr.	218	67
Ostrander, Robt. A.	138	54
Ostrowski, Arthur Z.	222	81
O'Sullivan, Girardin S.	174	60
Otis, Grant L.	98	46
Otlewski, Eugene A.	222	81
O'Toole, John	26	37
Ott, Harold A.	174	60

Name	*County Code*	*Page*
Ottaway, John P.	222	81
Otto, Donald	222	81
Oughtred, Orville	126	53
Outcalt, Herman A.	106	50
Overbeek, Ernest L.	106	50
Overbey, Chas. B., Jr.	102	47
Overy, Donald G.	174	60
Owen, Clarence I.	222	81
Ozdaglar, Mehmet N.	158	56
Ozeran, Chas. J.	26	37
Ozkan, Avni D.	106	50
Paalman, Russell J.	106	50
Pacho, Marc	126	37
Packard, David C.	174	60
Packer, James E.	190	63
Packer, John H.	90	44
Packer, Robert C.	162	56
Padelford, Wm. J.	26	37
Page, Oliver W., Jr.	174	60
Pahucki, Gena R.	218	67
Paine, Wm. G.	90	44
Painter, Robert	166	57
Palaszek, Theresa R.	106	50
Palmer, Algernon A.	218	67
Palmer, Alice E.	222	81
Palmer, Hayden D.	174	60
Palmer, Milton R.	222	81
Palmer, R. E.	90	44
Palmisano, I. J.	222	81
Panczak, Tamara	222	81
Panic, Stephen M.	222	81
Pantos, Theo G.	222	81
Papo, Michael	218	67
Pappalardo, Carlos	62	41
Paragas, Pedro G., Jr.	174	60
Parejo, Jose M.	222	81
Parfanowycz, Sophie N.	222	81
Paris, Delmo A.	126	53
Paris, S. William	174	60
Park, James H.	206	64
Park, Joon H.	90	44
Parker, Benj. R.	222	81
Parker, Donald A.	114	52
Parker, Earl E.	90	44
Parker, John C.	98	46
Parker, Thomas M.	82	43
Parks, Arthur E.	214	65
Parks, Floyd R., Jr.	22	36
Parliment, Burt A.	62	41
Parmelee, N. H.	126	53
Parmenter, Elbert S.	14	35
Parnagian, Leo	222	81
Parnell, John W.	222	81
Parr, Robt. W.	222	81
Parrish, Rufus H.	222	81
Parsons, Frank W.	162	56
Passos, Benjamin A.	58	39
Pasternacki, N. T.	222	81
Pastorius, Melvin K.	222	81
Patel, Vishnubhai U.	174	60
Paterson, Lester C.	162	56
Paterson, Roger	70	42
Patmos, Bernard	114	52
Patmos, Martin	102	47
Patrick, Chas. I.	174	60
Patrick, Gilbert T.	34	38
Patt, Albert J.	34	38
Patterson, Dorsey W.	194	64
Patterson, J. C.	174	60
Patterson, Wm. R.	218	67
Patton, Roy B.	222	81
Pattullo, Marshall	106	50
Paukstis, Chas. A.	138	54
Paul, Lloyd J.	222	81
Pauli, Theodore H.	174	60
Pawloski, Jerome I.	222	81

Name	*County Code*	*Page*
Paxton, Robt. E.	166	57
Payea, Norman P.	22	36
Payne, Andrew K.	98	46
Payne, Beverly C.	218	67
Payne, C. Allen	106	50
Payne, Charles E.	26	37
Payne, Eugene H.	222	81
Payne, Thomas C.	90	44
Payne, Walter A., Jr.	222	81
Paysner, Harry A.	222	81
Payton, Chas. F.	174	60
Peake, Chas. O., III	102	47
Peal, James A.	90	44
Pear, Erwin G.	174	60
Pearce, Arthur J.	222	81
Pearce, James F.	174	60
Pearlman, Jack	222	81
Pearse, Harry A.	222	81
Pearson, Delbert E.	218	67
Pearson, Donald J.	34	38
Pearson, Edwin O.	102	47
Pearson, Robt. E.	170	57
Pearson, Stanley M.	22	36
Pearson, Wallace G.	134	54
Peckham, Richard C.	150	55
Pedden, John R.	106	50
Pedelty, Norman	166	57
Pedersen, Herbert E.	222	81
Peelen, J. W.	102	47
Peelen, Matthew	102	47
Peets, Ronald	90	44
Peggs, Geo. F.	222	81
Peirce, John C.	106	50
Peirce, Wm. H.	174	60
Pelczar, Walter E.	22	36
Peller, Charles H.	218	67
Pelletier, Chas. J.	174	60
Pelto, Maurice S.	70	42
Pena, Carlos E. F.	222	81
Pena, Emilio	158	56
Pendy, Geo. V.	222	81
Pendy, John M.	222	81
Penner, David A.	222	81
Pennington, Harry C.	198	64
Pensavecchia, J. S.	174	60
Pensler, Leslie	222	81
Pensler, Meyer	222	82
Penzotti, Stanley C.	198	64
Percy, Donald F.	222	82
Perdue, Grace M.	222	82
Perez, Florence	126	53
Perez Gurri, Jose L.	222	82
Perkin, Frank S.	222	82
Perlis, Hyman L.	222	82
Perlis, Marvin S.	222	82
Perlman, Jack M.	218	67
Perry, Clifton W.	102	47
Perry, Florence J. C.	118	52
Perry, Joseph H.	222	82
Peshka, David K.	26	37
Petermann, Claus	222	82
Peters, Wm. R.	222	82
Peterson, Carl A.	78	43
Peterson, Gustav	222	82
Peterson, Robert A.	222	82
Peterson, Thomas R.	218	67
Peterson, Wm. D.	70	42
Peterson, Wm. F.	162	56
Petix, Saml. C.	222	82
Petoskey, Edward A.	222	82
Petrick, Thos. J.	222	82
Petrini, Mario A.	222	82
Petrohelds, Manousos A.	218	67
Petropoulos, Gust. C.	218	67
Petrucco, Louis A.	222	82
Pettinga, Frank L.	162	56
Petty, Thos. A.	222	82
Petz, Arthur John	222	82
Petz, Thomas J.	222	82
Peven, Philip S.	222	82
Pfeifer, Archibald C.	62	41
Pfister, Richard C.	174	60
Pfrender, Richard E.	218	67
Phelan, Alvin J.	114	52
Phelps, Everett L.	18	35
Phelps, Leland B.	106	50
Phelps, Lynn A.	62	41
Philippon, Carlos A.	14	35
Philips, David P.	90	44
Phillips, A. F.	62	41
Phillips, Burton E.	222	82
Phillips, Geo. H.	98	46
Phillips, Homer A.	190	63
Phillips, R. W.	118	52
Phillips, Rolland	206	64
Picard, Jos. D.	222	82
Piccone, Louisa I.	222	82
Pichette, J. Walton	222	82
Pickard, Orlando W.	222	82
Pickering, L. M.	222	82
Pickering, Woodrow H.	62	41
Pieper, Ernest	54	39
Pier, Clarence T.	34	38
Pierce, Edward C.	218	67
Pierce, Frank L.	38	38
Pierce, James M., Jr.	222	82
Pierce, Kenneth C.	38	38
Pierce, Robert E.	226	68
Pierpont, John	182	61
Pietraszewski, A. W.	222	82
Pike, Donald G.	70	42
Pike, Melvin H.	154	55
Pike, Wallace W.	62	41
Piligian, John T.	222	82
Pilling, Warren C.	106	50
Pillote, Florence A.	134	54
Pillote, John F.	134	54
Pingel, James F.	222	82
Pinkham, Raymond A.	102	47
Pinkus, Hermann K. B.	158	56
Pinney, Lyman J.	222	82
Pino, Ralph H.	222	82
Pipe, Lawrence D.	34	38
Piper, Ralph R.	222	82
Piskin, M. S.	106	50
Pitonyak, A. D.	174	60
Pittman, John E.	222	82
Pitts, Kenneth E.	222	82
Place, Edwin H.	218	67
Plant, John F.	90	44
Platt, Alice Lee	62	41
Platz, Carol K.	222	82
Plekker, Johannes D.	106	50
Plesscher, Wm. H.	90	44
Pliskow, Harold	222	82
Plotnick, Harold	222	82
Plous, Eugene J.	222	82
Podolsky, Harold M.	222	82
Pogrebniak, A.	222	82
Poim. Senta V.	222	82
Polack, Robt. T.	118	52
Polansky, Sanford	26	37
Polentz, Chas. P.	222	82
Polk, John E.	222	82
Pollack, Jerome L.	222	82
Pollack, John J.	222	82
Pollard, H. Marvin	218	67
Pollard, John C.	218	67
Pollard, Richard J.	222	82
Pollens, Louis S.	222	82
Pollina, Clement J.	222	82
Pollock, Robert	154	55
Pomeroy, Richard W.	90	44
Ponczek, E. J.	70	42
Pone, Janis	10	35
Ponka, Jos. L.	222	82
Pool, John D.	102	47
Pool, Lee R.	106	50
Pool, Robert, Jr.	174	60
Pool, Walter D.	222	82
Poos, Edgar E.	222	82
Pope, Gerald	222	82
Porretta, Anthony C.	126	53
Porretta, Charles A.	222	82
Porretta, Francis S.	222	82
Porretta, George F.	222	82
Porter, Chas. B.	26	37
Porter, Clark G.	198	64
Porter, Fredk. G.	222	82
Porter, Howard J.	222	82
Porter, Howard P.	106	50
Porter, Kenneth F.	174	60
Portney, Jack E.	62	41
Portnoy, Harold D.	174	60
Portnoy, Harry	222	82
Ports, Preston W.	174	60
Posch, Jos. L.	222	82
Posner, Irving	222	82
Post, J. Jay	186	62
Posthuma, Albert E.	106	50
Posthuma, Millard	226	68
Postigo, Julio C.	222	82
Postle, Jack R.	170	57
Postma, Edward Y.	106	50
Postma, Howard F.	106	50
Postmus, Roger W.	218	67
Potchen, E. James	106	50
Pott, Abraham L.	106	50
Potter, Marcia L.	218	67
Potts, Elihue B.	222	82
Potvin, Clifford D.	150	55
Pougnet, W. D.	62	41
Powell, C. E.	34	38
Powell, Donna	34	38
Powell, Gerald D.	90	44
Power, Frank H.	70	42
Power, John R.	34	38
Powers, Robt. F.	190	63
Powers, Ward O.	78	43
Powley, Gerald W.	102	47
Powsner, Rhoda M.	218	67
Poznak, Leonard A.	154	55
Poznanski, Andrew K.	222	82
Poznanski, Elva O.	174	60
Poznanski, Walter A.	174	60
Pracher, John R.	222	82
Prasad, Ananda S.	222	82
Prather, Perry E.	190	63
Pratt, Gordon C.	142	54
Pratt, Jean P.	222	82
Pratt, Lawrenee A.	222	82
Pratz, Oliver C.	62	41
Pray, Frank F.	98	46
Pray, Geo. R.	98	46
Preston, Joseph A.	98	46
Preston, Otto J.	62	41
Preston, Ruth E.	222	82
Preuss, Lawrence	218	67
Price, A. Hazen	222	82
Price, Alvin E.	222	82
Price, Jack R.	62	41
Price, Scott K.	222	82
Pridmore, John S.	174	60
Priest, Robt. J.	222	82
Prince, Addison E.	222	82
Prinsell, Gustave G.	190	63
Prior, Richard W.	62	41
Prisbe, Edward J.	222	82
Pritchard, Harold M.	26	37
Priver, Julien	222	82
Procailo, Alexander B.	222	82
Proctor, Bruce	174	60
Proctor, Conrad A.	218	67
Proctor, J. Laurence	222	82
Proctor, Leonard R.	222	82
Proctor, Lorne D.	222	82
Prokop, Frank P.	222	82

Name	*County Code*	*Page*
Prokopowycz, V.	222	82
Proos, Richard A.	102	47
Prophater, Robert C.	22	36
Proskey, Aloysius J.	222	82
Prothro, Winston B.	106	50
Proud, Russel F.	222	82
Prout, Gordon J.	218	67
Prus, A. Michael	222	82
Prust, Frank W.	222	82
Pryor, Robt. B.	18	35
Prystowsky, S.	222	82
Przybylski, Thom. J.	222	82
Pugh, Howard C.	222	82
Pugliesi, Angelo	222	82
Pugliesi, Benedetto	222	82
Pugliesi, Frank J.	126	53
Puite, Robert H.	106	50
Pullon, Alton E.	102	47
Purcell, F. L.	62	41
Purcell, Frank H.	222	82
Purfield, Wm. P.	218	67
Purmort, Wm. R., Jr.	122	52
Puro, Henry E.	222	82
Pursel, Stewart E.	222	82
Purves, W. L.	222	82
Pusezak, George B.	106	50
Quadir, Syed A.	26	37
Quarton, Albert E., Jr.	174	60
Quennell, W. L.	222	82
Quigley, Eugene H.	222	82
Quigley, J. Patrick	174	60
Quigley, Wm. G.	222	82
Quin, John, Jr.	62	41
Quinn, Edward L.	222	82
Quinn, James R., Jr.	174	60
Quinones, Rafael E.	222	82
Quiroz, Hugo	218	67
Raabe, Elmer C.	114	52
Rabiah, Fouad	62	41
Rabinovitch, Bella M.	222	82
Raby, Naim M.	222	82
Rachmaninoff, N.	222	82
Radcenko, Helen	62	41
Radcenko, Leonid	62	41
Radgens, Paul D.	222	82
Rae, James W., Jr.	218	67
Raftery, Michael	194	64
Ragan, Russell M.	62	41
Ragheb, Moufid	126	53
Ragins, Abner I.	174	60
Rahm, Lambert P.	222	82
Raiford, Frank P., Jr.	222	82
Raiman, Robert J.	106	50
Rakotz, Gerald	126	53
Ralph, L. Paul	106	50
Ralyea, Imbi	222	82
Rambo, Joseph J.	26	37
Ramirez, C. A.	126	53
Ramirez, Joaquin J.	174	60
Ramos, Antonio E.	126	53
Ramos, Benjamin R.	222	82
Ramos, Herminio R.	222	82
Ramsdell, Homer A.	130	54
Ramsey, J. A.	14	35
Ramsey, Robt. H.	222	82
Ramseyer, Gladwin E.	10	35
Randall, David S.	222	82
Randolph, Stephen H.	154	55
Rank, J. Eugene	190	63
Rank, Robert K.	74	42
Ranney, Kenneth I.	174	60
Ransom, Henry K.	218	67
Rao, D. S.	62	41
Raphael, Theophile	218	67
Rapoport, Bernard	222	82
Rapp, Robert	218	67
Rapp, Seymour L.	222	82
Rapport, Richard L.	62	41
Raskin, Herbert A.	222	82
Rasmussen, Leo B.	102	47
Rasmussen, Richard A.	106	50
Rastello, Peter B.	222	82
Rathburn, Robert J.	62	41
Ratliff, Rigdon K.	218	67
Rattner, Wm. H.	222	82
Ratzlaff, Alvin J.	178	61
Rau, Fredk. W.	222	82
Rauch, Carl T.	170	57
Raven, Clara	222	82
Ravin, Herbert A.	222	82
Ravitz, Louis A.	222	82
Rawling, John C.	62	41
Rawlings, J. Mott	62	41
Ray, Dean K.	26	37
Ray, Kenneth J.	222	82
Raynale, George P.	174	60
Raynor, Harold F.	222	82
Razi, Massoud	222	82
Read, James A.	174	60
Reagan, Robt. E.	26	37
Reames, Harold R.	102	47
Reardon, Daniel F.	106	50
Rebuck, John W.	222	82
Reeh, Wm. R.	174	60
Reddick, C. E.	42	38
Redding, Lowell G.	222	82
Reder, Benjamin	222	82
Redfern, W. Earl	222	82
Redmon, William B.	154	55
Reed, Ivor E.	222	82
Reed, Joseph O., Jr.	222	82
Reed, Melvin L.	222	82
Rees, Howard C.	222	82
Regan, William J., Jr.	218	67
Rehner, Robt. C.	218	67
Reichert, Carl E.	222	82
Reichert, Rudolph E., Jr.	218	67
Reichman, Jos. J.	190	63
Reid, Fred T.	174	60
Reid, Harold E.	90	44
Reid, John G.	222	82
Reid, John H.	62	41
Reid, Robert E.	174	60
Reid, Wesley G.	222	82
Reidinger, Alan A.	22	36
Reidt, William U.	222	82
Reiff, Morris V.	222	82
Reigel, Thomas J., Jr.	102	47
Reigle, Frederick C.	78	43
Reilly, Richard C.	174	60
Reimers, Gerald F.	190	63
Reinhard, Richard E.	222	82
Reinhart, Melvin J.	218	67
Reinsh, Ernest R.	222	82
Reisig, Albert H.	158	56
Reisig, Robert O.	222	82
Reisman, Nathan J.	222	82
Reisman, Saml. G.	222	82
Reitzel, Rufus H.	126	53
Reive, David L. E.	222	82
Reizen, Maurice S.	90	44
Reizner, Bernard Z.	34	38
Rekshan, Wm. R.	218	67
Relken, Richard C.	174	60
Remski, James E.	222	82
Rendziperis, N. C.	174	60
Rennell, Edwin J.	30	37
Reno, George L.	222	82
Rentenbach, Robt. F.	222	82
Repola, Kenneth L.	82	43
Resto, Manuel	222	82
Resto Soto, A. D.	222	82
Retallack, Russell C.	54	39
Reus, Leonard W.	170	57
Reus, Wm. F.	106	50
Reus, Wm. F., Jr.	106	50
Reutter, Carolyn	174	60
Reveno, Wm. S.	222	82
Revere, Jos. O.	126	53
Reye, George H.	62	41
Reyner, Clarence E.	222	82
Reynolds, Edward E.	90	44
Reynolds, Robt. M.	222	82
Rezanka, Harold J.	222	82
Rhind, Earl S.	42	38
Rhoades, Francis P.	222	82
Rice, Alan K.	62	41
Rice, Harold B.	222	82
Rice, John W.	98	46
Rice, Meshel	222	82
Rice, Robt. E.	94	45
Rice, R. G.	90	44
Rice, William T.	190	63
Richard, Robert E.	174	60
Richards, Chester J.	206	64
Richards, Frank D.	90	44
Richards, Ned W.	190	63
Richards, Wilson P.	174	60
Richardson, Allan L.	222	82
Richardson, M. L.	90	44
Richardson, Robt. P.	174	60
Richey, Bert R.	114	52
Richmond, Thomas F.	226	68
Richter, Harry J.	190	63
Rick, John J.	30	37
Rick, Paul J.	222	83
Riddell, Wilfred A.	222	83
Riddle, Charles B.	126	53
Rieckhoff, Geo. G.	222	83
Rieden, James A.	222	83
Rieger, John B.	222	83
Rieger, Mary H.	222	83
Riekse, James M.	106	50
Rienstra, John C.	106	50
Ries, Richard G.	98	46
Ries, Robt. C.	14	35
Rieth, Geo. F.	62	41
Riethmiller, Robt. F.	222	83
Riggs, Harry L.	174	60
Rigterink, Gerald H.	102	47
Riker, Aaron D.	174	60
Riker, Donald D.	218	67
Riker, John L.	14	35
Riley, Jos. L.	58	39
Riley, Paul M.	106	50
Riley, Philip A.	98	46
Riley, Philip A., Jr.	98	46
Rinaldo, Joseph, Jr.	222	83
Ringenberg, J. C.	106	50
Ringer, Paul H., Jr.	74	42
Rinkel, Robert W.	222	83
Rinkenberger, E. A.	126	53
Risk, Robt. D.	162	56
Ritter, Frank N.	218	67
Ritter, George	222	83
Rivera, Eduardo	174	60
Rivera, Emiliano, Jr.	222	83
Rivkin, Jos.	126	53
Rizzo, Albert	26	37
Rizzo, Paul	222	83
Robb, Chas. S.	106	50
Robb, Edward L.	222	83
Robb, Herbert J.	222	83
Robbert, John	34	38
Robbert, John H.	106	50
Roberge, Jerome T.	34	38
Roberts, Arthur J.	222	83
Roberts, Floyd A.	62	41
Roberts, George A.	222	83
Roberts, Millard S.	102	47

Name	County Code	Page
Roberts, Warren J.	54	39
Robertson, Fredk. E.	222	83
Robertson, Perry C.	94	45
Robinson, Harold A.	222	83
Robinson, Howard	222	83
Robinson, James H., Jr.	222	83
Robinson, Orlo J., Jr.	218	67
Robinson, Remus G.	222	83
Robinson, Stanley R.	58	39
Robinson, Thomas H.	90	44
Robinson, Wm. D.	218	67
Robinson, Wm. G.	178	61
Robson, Edmund J.	90	44
Robson, Larry J.	106	50
Roche, Andrew M.	82	43
Rockwell, Donald C.	102	47
Rodda, Edward H.	22	36
Rodger, John R.	170	57
Rodgers, Wm. L.	106	50
Rodin, Ernst A.	222	83
Rodriquez, Leopoldo	98	46
Roehl, Karl H.	222	83
Roehm, Harold R.	174	60
Roelofs, Charles W.	106	50
Roesler, Hugo K.	102	47
Rogers, Aaron Z.	222	83
Rogers, Charles S.	22	36
Rogers, Geo. E. B.	222	83
Rogers, J. Speed	90	44
Rogers, John T.	222	83
Rogers, Robert P.	222	83
Rogers, Rodney J.	102	47
Roggen, Ivan J.	190	63
Rogoff, Abraham S.	222	83
Rohde, Paul C.	222	83
Rollstin, Robt. A.	90	44
Roman, Stanley J.	222	83
Romanik, John H.	174	60
Romanski, Raymond	222	83
Ronayne, John J., Jr.	222	83
Rood, Robert C.	222	83
Rooks, Wendell H.	106	50
Rooney, Robert	126	53
Roosenberg, William	106	50
Root, Fayette C.	222	83
Rorich, Wilma C. W.	34	38
Rosbolt, James F.	222	83
Rosbolt, O. Paul, Jr.	222	83
Rosefield, John L.	222	83
Rosello, Luis	222	83
Rosen, Harold M.	222	83
Rosen, Theodore S.	222	83
Rosenbaum, Herbert	222	83
Rosenbaum, Louis	134	54
Rosenbloom, Alvin B.	222	83
Rosenow, K. G.	130	54
Rosenthal, Albert	222	83
Rosenthal, Louis H.	222	83
Rosenthal, Saml.	222	83
Rosenwach, Felix F.	222	83
Rosenzweig, Leonard	106	50
Rosenzweig, Norman	222	83
Rosenzweig, Saul	222	83
Ross, Arthur J.	222	83
Ross, Charles V.	222	83
Ross, C. Howard	218	67
Ross, Mervyn B.	222	83
Ross, Oscar A.	222	83
Rossin, Herbert W.	174	60
Rotarius, Edward M.	222	83
Roth, Edward T.	222	83
Roth, Emil M.	106	50
Roth, Geo. E.	126	53
Roth, Herbert J.	174	60
Roth, Wm. J.	74	42
Rother, Ina A. C.	222	83
Rothman, Arthur M.	126	53
Rothwell, Walter S.	222	83
Rotstein, Jack	218	67
Rottenberg, C. M. J.	222	83
Rottenberg, E. N.	222	83
Rottenberg, Leon	222	83
Rottschaefer, Wm.	186	62
Rottschaefer, John L.	74	42
Roty, August R., Jr.	102	47
Roty, Robert L.	206	64
Rotz, Lloyd	186	62
Roubeck, William	222	83
Rourke, Ronald E.	126	53
Rousseau, Daniel L.	126	53
Rowan, Russell C.	34	38
Rowda, Michael S.	222	83
Rowe, John B.	62	41
Rowe, Jos. J., Jr.	222	83
Rowe, Kenneth E.	82	43
Rowe, Paul W.	22	36
Rowe, Robt. E.	194	64
Rowell, Wilfred J.	14	35
Rowley, Laurie G.	174	60
Roy, L. James	222	83
Royer, Clark W.	34	38
Royer, Richard R.	222	83
Rua, Ignacio	98	46
Rubinoff, William	222	83
Rubio, Epimaco	222	83
Ruble, Paul E.	222	83
Rucker, Joseph	98	46
Rucknagel, Donald L.	218	67
Rudner, Earl J.	222	83
Ruedemann, Albert D.	222	83
Ruedemann, A. D., Jr.	222	83
Ruedisueli, C. A.	126	53
Rueger, Milton J.	222	83
Rueger, Ralph C.	222	83
Ruel, Richard E.	222	83
Ruesink, Donald E.	174	60
Ruhmkorff, Ralph H.	90	44
Ruiz, Luis C.	222	83
Rule, Jack A.	222	83
Rulney, Max	62	41
Rundles, Walter Z.	62	41
Runge, Edward F.	222	83
Rupe, Clarence E.	222	83
Rupke, John A.	106	50
Rupp, Edson C., Jr.	174	60
Rupp, Theo J.	106	50
Rupprecht, Emil F.	222	83
Rusak, R. D.	150	55
Rush, Alva D., Jr.	174	60
Rush, Desmond K.	222	83
Rush, William E.	126	53
Ruskin, Dave B.	190	63
Ruskin, David S.	174	60
Ruskin, Robert L.	222	83
Ruskin, Saml. H.	222	83
Russanow, Georg	222	83
Russcher, Allan H.	102	47
Russell, Henry N., Jr.	222	83
Russell, Paul	126	53
Russell, Sherwood R.	46	38
Russell, Vincent P.	174	60
Russo, Sam F.	218	67
Ruth, J. Griswold	26	37
Rutledge, Saml. H., Jr.	90	44
Rutzen, Arthur C.	222	83
Rutzky, Julius	174	60
Ruva, Jos. J.	174	60
Ruzumna, Richard A.	222	83
Ryan, Chas. J.	34	38
Ryan, Fredk. C.	102	47
Ryan, Jack	126	53
Ryan, James M.	222	83
Ryan, John A.	106	50
Ryan, Richard S.	190	63
Ryan, Thomas E.	126	53
Ryan, William D.	222	83
Ryde, Robt. E.	50	39
Rye, Wm. A.	102	47
Rypkema, Willard M.	186	62
Ryskamp, James J., Jr.	106	50
Sabbagh, Enrique	222	83
Sabin, Fredk. C.	134	54
Sack, Anthony G.	222	83
Sadler, Henry H., Jr.	222	83
Sadovsky, Vincent J.	174	60
Sadzikowski, Jos. T.	222	83
Saenz, Hugo R.	90	44
Safavian, M. H.	174	60
Sage, Bernard A.	222	83
Sage, Edward D.	102	47
Sager, Edward L.	222	83
Sahlmark, Jos. F.	206	64
St. Amour, Hector J.	222	83
St. John, Harold A.	174	60
St. Louis, Rene J.	222	83
Saker, James H.	90	44
Sakorraphos, S. N.	222	83
Sakwa, Saul	222	83
Salamon, Fredk. A.	222	83
Salan, Lacy J.	222	83
Salchow, Paul T.	222	83
Salem, Edward S.	222	83
Salhaney, Mitchell	222	83
Salisbury, Carolyn S.	174	60
Sall, Caroline D.	222	83
Sallee, William T.	222	83
Salman, Feyyaz	22	36
Salon, Dayton D.	70	42
Salot, Russell F.	126	53
Saltonstall, G. B.	170	57
Saltzstein, Harry C.	222	83
Salva, Donald L.	222	83
Salvaggio, A. T.	222	83
Samberg, L. Carl	222	83
Samborski, Anne H.	174	60
Samet, Norman	126	53
Sampaio, Carlos A.	62	41
Sample, John T.	190	63
Sanchez, Hugo M.	218	67
Sand, Harry H.	222	83
Sandberg, Hershel	222	83
Sandberg, Russell G.	62	41
Sandell, Samuel T.	82	43
Sanden, Howard V.	162	56
Sander, Irvin W.	222	83
Sander, John F.	90	44
Sanders, Alexander W.	222	83
Sanders, Jack F.	74	42
Sanderson, Alvord R.	222	83
Sanderson, James M.	226	68
Sanderson, Jos. L.	194	64
Sandler, Nathaniel	222	83
Sands, Geo. E.	194	64
Sanford, Glenn A.	174	60
Sanislow, Charles A.	154	55
Sanocki, Fredk. E.	62	41
Sansone, Thos. L.	174	60
Santinga, John T.	170	57
Santini, Florian J.	66	41
Sapala, M. Andrew	222	83
Saraf, Leo B.	222	83
Sarapo, Donato F.	114	52
Sargent, Donald V.	190	63
Sargent, Douglas A.	222	83
Sargent, Leland E.	98	46
Sargent, Richard C.	222	83
Sargent, William R.	222	83
Sarmiento, Manuel	222	83
Sarnacki, Carl J.	126	53
Sarracino, John B.	222	83
Satersmoen, Theodore	174	60
Sauer, Peter	206	64
Sauk, John J.	222	83
Saunders, Allen	218	67
Saunders, Gene A.	222	83

Name	County Code	Page
Sauter, Simon H.	222	83
Sautter, Wm. A.	98	46
Savage, Lloyd L.	210	65
Savory, John H.	170	57
Sawdyke, Daria H.	222	83
Sawvell, Austin R.	90	44
Sawyer, Howard J.	218	67
Sawyer, Walter W.	78	43
Sayani, Ian	182	61
Sayre, Geo. S.	218	67
Sazyc, Joseph S.	222	83
Scallin, J. F.	90	44
Scarney, Herman D.	222	83
Scavarda, Chas. J.	62	41
Schaefer, Donald L.	218	67
Schaefer, Heinrich C.	222	83
Schaefer, Joseph C.	170	57
Schaefer, Richard K.	62	41
Schaefer, Robt. L.	222	83
Schaefer, Robt. L., Jr.	222	83
Schaefer, Waldo A.	194	64
Schaefer, Wm. C.	174	60
Schaeffer, Joseph N.	222	83
Schaeffer, Martin	222	83
Schaffer, Carole S.	90	44
Schaftenaar, R. H.	186	62
Schaiberger, Geo. L.	150	55
Schakne, Norman	222	83
Schane, David A.	222	83
Scharf, Forrest	154	55
Scharnweber, H. C.	154	55
Schatten, Ivan C.	222	83
Schaubel, Howard J.	106	50
Scheidler, Edward P.	70	42
Scheidt, R. Rudolph	90	44
Schek, Donald C.	106	50
Schembeck, Isaac S.	222	83
Schenden, A. J.	118	52
Scher, Jos. N.	126	53
Scher, Sydney	126	53
Scherer, Flora E.	102	47
Scherer, Robert A.	222	83
Schermerhorn, L. J.	106	50
Scheurer, Clare A.	86	43
Schidlowsky, Oleg P.	222	83
Schiff, Benton A.	62	41
Schiller, Arthur E.	222	83
Schillinger, H. K.	30	37
Schimnoski, Donald Ray	198	64
Schirack, Raymond D.	222	83
Schirle, Jos. L., Jr.	174	60
Schkloven, Norman	222	83
Schlafer, Nathan H.	222	83
Schleete, Eve M.	218	67
Schlecte, I. Carl	174	60
Schlesinger, Henry	222	83
Schlosser, Ralph J.	106	50
Schmaltz, John D.	222	83
Schmelzer, Wm. J.	22	36
Schmidlin, Robert W.	62	41
Schmidt, Frederick	186	62
Schmidt, C. M.	218	67
Schmidt, David W.	218	67
Schmidt, George J.	222	83
Schmidt, Harry E.	222	83
Schmidt, Harry J.	90	45
Schmidt, Johann	222	84
Schmidt, Klaus P.	222	84
Schmidt, Merle C.	134	54
Schmidt, Theophile E.	98	46
Schmidt, Werner F.	222	84
Schmier, Burton L.	222	84
Schmitt, Norman L.	222	84
Schmitt, Phillip E.	174	60
Schmunk, Robert F.	126	53
Schmutzler, Walter A.	54	39
Schneck, Robert J.	222	84
Schneider, Aaron	174	60
Schneider, A. J. N.	190	63

Name	County Code	Page
Schneider, Chas. L.	222	84
Schneider, Curt P.	222	84
Schneider, Edward M.	102	47
Schneider, Geo. R.	106	50
Schneider, Richard C.	218	67
Schneider, R. H.	98	46
Schneiter, Harry E.	10	35
Schneyer, Jerome J.	174	60
Schnoor, Elmer W.	106	50
Schnute, Louise F.	106	50
Schoch, Henry K.	218	67
Schock, William H.	10	35
Schoenfeld, Robert J.	174	60
Schoenfield, Gilbert D.	222	84
Schoff, Charles A.	154	55
Scholdager, Rolf H.	222	84
Scholes, Danl. R.	174	60
Scholl, James W.	102	47
Scholle, Norbert W.	162	56
Scholten, Roger A.	102	47
Scholten, William	102	47
Schooten, Sarah S.	222	84
Schorer, Calvin E.	222	84
Schrader, Frank J.	98	46
Schreiber, E. Oskar	62	41
Schreier, Leonard	222	84
Schreiner, Robert J.	174	60
Schrieber, R. S.	102	47
Schrier, Clarence T. M.	102	47
Schrier, Thomas	102	47
Schrock, Marvin E.	174	60
Schroeder, Alan F.	106	50
Schroeder, Carlisle F.	222	84
Schroeder, Dwight M.	70	42
Schroeder, Gisela	222	84
Schroeder, Heinz R.	222	84
Schroeder, John M.	54	39
Schroeder, Karl F.	222	84
Schroeder, Paul E.	62	41
Schroeder, W. Gene	134	54
Schuchter, S. L.	222	84
Schulte, Carl H.	222	84
Schultz, Arthur E.	90	45
Schultz, Clarence H.	222	84
Schultz, Donald V.	222	84
Schultz, Ernest C.	222	84
Schultz, E. C., Jr.	218	67
Schultz, Frank R.	190	63
Schultz, J. Stanley	62	41
Schumacher, Wm. E.	218	67
Schuman, Bernard M.	222	84
Schuneman, Howard A.	174	60
Schunk, Herbert	218	67
Schut, Almon L.	102	47
Schwaderer, Thos. G.	106	50
Schwallie, Paul C.	102	47
Schwartz, Benj.	222	84
Schwartz, David	174	60
Schwartz, Harold A.	222	84
Schwartz, John M.	62	41
Schwartz, Louis A.	222	84
Schwartz, Oscar D.	222	84
Schwartz, Sheldon A.	218	67
Schwartzberg, J. A.	222	84
Schwarz, Frank W.	222	84
Schwarz, Heinz H.	62	41
Schwarz, Marlowe L.	130	54
Schweigert, C. F.	222	84
Schweinsberg, Sara K. D.	134	54
Schwimmer, Benjamin	222	84
Schwing, Donald N.	130	54
Schwocho, Niles H.	222	84
Sciarrino, Stanley V.	222	84
Scott, Dale	42	38
Scott, James S.	46	38
Scott, John A., Jr.	98	46
Scott, Lincoln B., Jr.	74	42
Scott, Marrion U.	222	84
Scott, Robert D.	62	41

Name	County Code	Page
Scott, Wm. J.	222	84
Scovill, Henry A.	218	67
Screen, Raymond J.	222	84
Sculley, Raymond E.	106	50
Seaborn, Arthur J.	174	60
Seager, M. Cole	202	64
Secord, Eugene W.	222	84
Seevers, Maurice H.	218	67
Segal, Andrew E.	222	84
Segar, Laurence F.	222	84
Segat, Maria Z.	218	67
Segel, Nathan P.	222	84
Seger, Dean W.	226	68
Seger, Fred L.	90	45
Segula, Robert L.	174	60
Seibert, Alvin H.	222	84
Seiferlein, A. L.	222	84
Seifert, Charles	34	38
Seim, Elmer J.	222	84
Seime, Reuben I.	106	50
Seitam, Karl	222	84
Selbst, Ronald A.	222	84
Selby, Clarence D.	194	64
Self, Wm. G.	222	84
Selim, Mahmoud M.	222	84
Sellers, Chas. W.	222	84
Sellers, Graham A.	222	84
Selman, Robert	174	60
Seltzer, Joseph	222	84
Selzer, Isidore	222	84
Selzer, Melvin L.	218	67
Sempere, Chas. R.	174	61
Senecoff, Stephen D.	222	84
Sentkeresty, J. A.	106	50
Sepetys, Povilas	222	84
Serniak, John A.	194	64
Seski, Arthur G.	222	84
Seven, Phillip G.	62	41
Sevener, Lester G.	58	39
Sevensma, Elisha S.	106	50
Sevensma, Eugene S.	106	50
Severyn, Fred R.	222	84
Sewell, Geo.	222	84
Sewell, Geo. R.	174	61
Sewell, Guy W.	222	84
Seymour, Geo. D.	62	41
Shaalan, A. Karim	222	84
Shadley, Maxwell L.	174	61
Shadoan, James D.	218	67
Shaeffer, Leland D.	98	46
Shafadeh, Asghar	222	84
Shafarman, Eugene M.	222	84
Shafer, Harold C.	22	36
Shaffer, Jos. H.	222	84
Shaffer, Loren W.	222	84
Shafter, Royce R.	222	84
Shammas, Jules	218	67
Shams Avari, Parviz	222	84
Shanahan, Robert E.	170	57
Shannon, Gordon	114	52
Shanoski, Stanley J.	222	84
Shantz, Leighton O.	62	41
Shapiro, Hyman D.	90	45
Shapiro, Jack	222	84
Shapiro, Reuben I.	222	84
Shaptini, Elias A.	222	84
Sharbrough, F. W., III	218	67
Sharda, Martin	106	50
Shargel, Geo. M. J.	222	84
Sharp, Ara D.	34	38
Sharp, Elwood A.	222	84
Sharp, Mahlon S.	90	45
Sharp, Martin C.	190	63
Sharp, Robert B.	106	50
Sharpe, Wm. D.	222	84
Sharrer, Chas H.	222	84
Shaw, Geo. D.	198	64
Shaw, Milton	90	45
Shawky, Yehya A.	126	53

Name	*County Code*	*Page*
Shaya, Ezra S.	126	53
Shea, Francis P.	222	84
Shea, James Joseph	174	61
Shearer, M. L., Jr.	218	67
Shearer, M. R.	218	67
Shebesta, Emil M.	162	56
Shecter, Harry	222	84
Sheehan, Irene C.	222	84
Sheehan, Shelia	222	84
Sheeran, Danl. H.	62	41
Sheets, John A.	170	57
Sheets, Joseph L.	90	45
Sheffield, Loren C.	174	61
Shek, John L.	190	63
Shekerjian, Armen	222	84
Shelden, Warren E.	222	84
Sheldon, John M.	218	67
Sheldon, John P.	198	64
Sheldon, Suel A.	190	63
Shelfoon, Delores J.	222	84
Sheline, Victor L.	46	38
Shellenberger, H. M.	34	38
Shelton, John C.	218	67
Sheng, Luke H. C.	118	52
Sheperdigian, A. A.	218	67
Shepherd, Walter F.	206	64
Sheppard, Lawrence F.	126	53
Sher, David B.	98	46
Sherbin, Herbert D.	126	53
Sheridan, Francis M.	174	61
Sherk, Douglas	54	39
Sherkat, Mehdi	174	61
Sherman, Eber B.	58	39
Sherman, Geo. A.	90	45
Sherman, John W.	190	63
Sherman, Marvin	222	84
Sherman, W. La Rue	222	84
Sherman, Wm. L., Jr.	222	84
Sherrin, Edgar R.	222	84
Sherwood, Frederick	62	41
Shevin, Frederick F.	222	84
Shewchuk, A. P.	222	84
Shields, Hubert L.	22	36
Shields, John L.	62	41
Shields, Wm. L.	222	84
Shiffman, Milton M.	222	84
Shifrin, Peter G.	222	84
Shin, Eon	222	84
Shiovitz, Louis	222	84
Shipman, Charles W.	154	55
Shipp, Leland P.	34	38
Shipton, Waldo H.	222	84
Shlain, Benj.	222	84
Shoecraft, Harriet L.	218	67
Shors, Clayton M.	222	84
Shortz, Gerald	222	84
Shoudy, Elmore D.	194	64
Shreve, Alfred J.	222	84
Shriner, John W.	154	55
Shuey, John M.	222	84
Shufro, Arthur S.	222	84
Shulman, Herschel A.	222	84
Shumaker, Edward J.	222	84
Sibilsky, A. Clark	34	38
Sichler, Harper G.	90	45
Sidagis, Joseph	86	43
Siddall, Roger S.	222	84
Sidell, Richard H.	106	50
Sieber, Edward H.	222	84
Siebers, Bernard H.	106	50
Siebert, William E.	222	84
Siefert, John L.	222	84
Siegel, Alan E.	106	50
Siegel, David	90	45
Siegel, Henry	222	84
Siegel, Marvin D.	174	61
Siegfried, Edward G.	126	53
Siero, Jose M.	222	84
Sievers, Lorraine A.	222	84
Siffring, Loren W.	174	61
Sigler, John W.	222	84
Sigler, Louis E., Jr.	218	67
Sikkema, Donald E.	106	50
Silberg, Joel J.	174	61
Silbergleit, Allen	222	84
Sill, Henry W.	98	46
Sill, Jacob A.	222	84
Siller, John J.	222	84
Siller, Theodore N.	222	84
Sillery, Robert J.	222	84
Sills, Richard D.	222	84
Silvani, John	174	61
Silvarman, Israel Z.	222	84
Silver, Donald F.	222	84
Silver, Israel W.	222	84
Silver, Marvin D.	174	61
Silver, Robert R.	222	84
Silverman, Irving E.	90	45
Silverman, Maurice M.	222	84
Silverman, Max	222	84
Silverman, M. P.	126	53
Silverstein, M. E.	222	84
Silverstein, O. D.	222	84
Silvert, Pasche P.	74	42
Silvestre, Mario S.	222	84
Simard, J. E. Henri	222	84
Simmons, Donald R.	222	84
Simmons, Milton F.	126	53
Simon, Heinz G.	222	84
Simoni, Lewis E.	62	41
Simpson, Bernard W.	102	47
Simpson, Edward K.	174	61
Simpson, Gordon E.	222	84
Simpson, John F.	218	67
Simpson, John R.	174	61
Simpson, Robert S.	34	38
Sims, Wm. N.	126	53
Simson, Clyde B.	222	84
Simson, Laurence R.	218	67
Singer, Floyd W.	222	84
Singer, Nelson	126	53
Sippola, Geo. W.	222	84
Sirhal, Alfred M.	98	46
Sirna, Anthony R.	62	41
Sirola Foreman, Olga	218	68
Sisman, Bernard	158	56
Sisson, James C.	218	68
Sites, Edgar C.	194	64
Sitterley, Brooks H.	218	68
Sivak, B. J.	222	84
Skellenger, Wm. S.	102	47
Skendzel, L. P.	70	42
Skinner, James W.	26	37
Sklar, Manuel	222	84
Skowronski, C. A.	190	63
Skufis, Eleanor P.	114	52
Skufis, Xenophon	114	52
Skully, Edward J.	222	84
Slade, Homer G.	190	63
Sladek, Edward F.	70	42
Sladen, Frank J.	222	84
Slagh, Earl M.	46	38
Slagh, Milton E.	94	45
Slagle, Geo. W.	34	38
Slatmyer, Karel R., Jr.	102	47
Slaughter, Fred M.	222	84
Slazinski, Leo W.	222	84
Slee, Vergil N.	218	68
Sleight, Justin L.	90	45
Slenger, Walworth R.	102	47
Slevin, John G.	222	84
Sliwin, Edward P.	222	84
Sloan, David B., Jr.	218	68
Sloan, J. Bernard	218	68
Sloan, Paul S.	82	43
Slusky, Jos.	222	84
Sluyter, John S.	106	50
Sly, Robert F.	222	84
Small, Harvey O. J.	222	84
Small, Henry	222	84
Small, John	222	84
Smalley, R. H.	62	41
Smathers, Homer M.	222	84
Smathers, Ward M.	222	84
Smeck, Arthur R.	222	84
Smiggen, James J.	222	84
Smillie, John W.	218	68
Smit, George J.	186	62
Smit, Henry	186	62
Smith, Andrew J., Jr.	222	84
Smith, Anthony V.	90	45
Smith, Carleton A.	174	61
Smith, Clark B.	78	43
Smith, Claude A.	222	84
Smith, Dean B.	106	50
Smith, Dean W.	98	46
Smith, Dennis V.	74	42
Smith, Donald C.	218	68
Smith, Donald R.	54	39
Smith, Donald S.	174	61
Smith, Donald S., Jr.	154	55
Smith, Douglas H.	222	84
Smith, Duane E.	202	64
Smith, Edwin M.	218	68
Smith, Eleanor	218	68
Smith, Ellen	110	52
Smith, Eugene C.	62	41
Smith, Franklin W.	46	38
Smith, F. Janney	222	85
Smith, Geo. E.	174	61
Smith, Glenn L.	110	52
Smith, Harold O.	62	41
Smith, Henry L.	222	85
Smith, James R.	170	57
Smith, J. Allen	222	85
Smith, John H.	106	50
Smith, Maurice J.	62	41
Smith, Ray C., Jr.	10	35
Smith, Richard H.	222	85
Smith, Richmond W., Jr.	222	85
Smith, Robert B.	106	50
Smith, Robert D.	198	64
Smith, Robert E.	162	56
Smith, Robert O.	94	45
Smith, Roger F.	222	85
Smith, Roger J.	102	47
Smith, Russell F.	218	68
Smith, R. Earle	106	51
Smith, Sidney E.	62	41
Smith, W. B.	26	37
Smith, W. Pierce	222	85
Smith, William S.	218	68
Smock, Sidney N.	154	55
Smolenski, John J.	222	85
Smookler, Bernard H.	90	45
Smyka, Stanley M.	222	85
Snide, Rollin F.	170	57
Snider, Eugene A.	222	85
Snider, James J.	194	64
Snider, John D.	106	51
Snider, Thomas H.	222	85
Sniderman, Benj. F.	62	41
Snoke, Edwin C.	222	85
Snow, Linwood W.	222	85
Snyder, Clarence A.	106	51
Snyder, Clarence H.	106	51
Snyder, Le Moyne	90	45
Snyder, Richard J.	222	85
Snyder, Ruth C. E.	90	45
Sobel, Robert A.	222	85
Soble, Allen R.	222	85
Socha, Edmund S.	94	45
Soderberg, Ralph B.	222	85
Sofen, Morris B.	102	47
Soifer, Sidney	222	85
Sokol, Wm. M.	222	85
Sokolov, Raymond A.	222	85

Name	*County Code*	*Page*
Sokolowski, A. H.	222	85
Solberg, Lincoln E.	222	85
Soleymani, Sion	222	85
Solik, A. E.	62	41
Soller, Alex S.	222	85
Solomon, A. B.	222	85
Solomon, Joseph A.	42	38
Solomon, Robert J.	222	85
Somach, Fredric M.	62	41
Somerville, Thos. H.	222	85
Somerville, Wm. J.	174	61
Sommerness, M. Duane	70	42
Sonda, Lewis P.	222	85
Sonda, Lewis P., Jr.	222	85
Songe, Robert A.	222	85
Sorensen, Maurice G.	86	43
Sori, Manuel R.	26	37
Soriano, D. A.	74	42
Sorkin, Morris L.	62	41
Sorkin, Saml. S.	62	41
Sorock, Milton L.	222	85
Sorscher, Alan J.	62	41
Sorum, F. T.	70	42
Sosa, Carlos M. A.	222	85
Sosa, Freddy R.	222	85
Sosin, Allen	174	61
Southern, Edward	10	35
Southwick, C. H.	106	51
Southwick, G. Howard	106	51
Southworth, M. N.	102	47
Sowa, Elizabeth C.	222	85
Sowers, Bouton F.	26	37
Spademan, Loren C.	174	61
Spagnuolo, Alfred J.	90	45
Spalding, R. W.	214	65
Sparks, Harvey V.	62	41
Sparling, Irene L. M.	218	68
Speck, Carlos C.	222	85
Spector, Maurice J.	222	85
Speer, David L.	222	85
Spencer, Collis M.	34	38
Spencer, Herbert H.	218	68
Spencer, John R.	70	42
Spencer, J. Clyde	90	45
Spencer, Lloyd H.	174	61
Spencer, Perry C.	90	45
Spengler, Donald E.	190	63
Spens, James E.	14	35
Sperry, Frederick L.	222	85
Sphire, Raymond D.	222	85
Spiegelmann, H. L.	222	85
Spindler, James R.	62	41
Spiro, Adolph S.	222	85
Spiwak, Bertram J.	222	85
Spoehr, Eugene L.	174	61
Spohn, Earle W.	174	61
Sprague, Wm. E.	106	51
Springborn, Benj. R.	222	85
Springgate, R. R.	102	47
Sprunk, Carl J.	222	85
Spurrier, Ethelbert	222	85
Squires, Walter M.	222	85
Stack, John M.	74	42
Stackable, Wm. R.	98	46
Stadle, Wendall H.	34	38
Stageman, John C.	174	61
Stagg, Adelbert L.	214	65
Stagg, G. Lee	214	65
Stagg, Ruth E. A.	214	65
Staley, Hugh O.	22	36
Stalker, Hugh	222	85
Stamell, Benjamin B.	222	85
Stamell, Meyer	222	85
Stander, Aaron C.	190	63
Standiford, David	22	36
Stanisavljevic, S.	174	61
Stanley, Arthur L.	90	45
Stanley, Wm. F.	174	61
Stanton, James	126	54
Stanton, James M.	222	85
Stanton, Myron R.	222	85
Stapleton, Wm. J., Jr.	222	85
Starbird, Wm. A.	126	54
Starico, Renato	222	85
Starkman, Morris	126	54
Starman, Marvin L.	218	68
Starr, Charles R.	106	51
Staryk, Steven E.	222	85
Statzer, Darrell E.	222	85
Staub, Howard P.	222	85
Staudt, Louis W.	222	85
Stealy, Stanley A.	150	55
Stearns, Alexander B.	222	85
Stebbins, Chas. E.	222	85
Steel, William B.	222	85
Steele, Arthur H.	214	65
Steele, George H.	126	54
Steepe, Charles A. D.	222	85
Stefani, Andrew E.	222	85
Stefani, Ernest L.	222	85
Stefani, Raymond T.	222	85
Steffe, Ralph S.	62	41
Steffee, William P.	162	56
Steffensen, W. H.	106	51
Steffes, Everette M.	174	61
Steffey, Joseph C.	70	42
Stehman, Vernon A.	90	45
Steiger, Zwi	222	85
Stein, Albert H.	222	85
Stein, Arthur J.	78	43
Stein, Emory	222	85
Stein, Harvey S.	222	85
Stein, Saul C.	222	85
Steinbach, Albert L.	222	85
Steinberger, Eugene	126	54
Steinberger, E. J.	222	85
Steinem, David L.	90	45
Steiner, Abraham A.	90	45
Steiner, Fredk. B.	222	85
Steiner, Starling D.	222	85
Steinhardt, Edward E.	86	43
Steinhardt, Milton J.	222	85
Steinke, Chas. G.	54	39
Steinman, Floyd H.	62	41
Stelle, Robert E.	54	39
Stellhorn, Chester E.	222	85
Stellhorn, Mary C.	222	85
Stempel, Edward M.	222	85
Stephan, Winton E.	90	45
Stephenson, C. D.	34	38
Stephenson, Wesley F.	46	38
Stephenson, Joy O.	158	56
Stepka, Joseph E.	126	54
Sterba, Richard F.	222	85
Stern, Julian	222	85
Stern, Leonard H.	222	85
Stern, Louis D.	222	85
Stern, Sheldon D.	174	61
Sternhill, Vernon	222	85
Stetten, Maynard L.	218	68
Steude, Georgine M.	218	68
Stevens, Charles E.	94	45
Stevens, Chas. H.	222	85
Stevens, Philip K.	62	41
Stevenson, Chas. S.	222	85
Stevenson, Lee B.	222	85
Stevenson, Wm. W.	62	41
Stewart, Geo. W.	190	63
Stewart, Landis C.	114	52
Stewart, Lewis L., Jr.	98	46
Stewart, Maitland N., Jr.	222	85
Stewart, Marjorie	222	85
Stewart, Richard	154	55
Stewart, R. B.	102	47
Stewart, Robert M.	222	85
Stewart, Wm. C., Jr.	102	47
Stewart, William K.	30	37
Stief, Kirwin	126	54
Stiefel, Danl. M.	222	85
Stiefel, Richard A.	34	38
Stieglitz, L. D.	102	47
Stiller, Anthony F.	102	47
Stillwater, Karl	222	85
Stilwell, James R.	102	47
Stilwill, Geo. D.	90	45
Stimson, Cyrus W.	218	68
Stimson, Paul R.	90	45
Stith, Dwight E.	222	85
Stobbe, Godfrey D.	222	85
Stobbelaar, Robert H.	186	62
Stock, Thomas B.	222	85
Stocker, Lawrence L.	222	85
Stocker, Marvin L.	222	85
Stockwell, Benj. W.	222	85
Stokes, G. Edward	70	42
Stokfisz, Thaddeus	222	85
Stolberg, Carl A.	98	46
Stoller, Paul F.	46	38
Stoller, Raymond	222	85
Stolpman, A. K.	174	61
Stolte, Jon L.	174	61
Stone, Benj. J.	90	45
Stone, Ethon L.	98	46
Stone, John M.	174	61
Stone, Julius	126	54
Stone, Sidney L.	222	85
Stonehouse, Garnet G.	106	51
Stoneman, Fernley	106	51
Storer, William R.	198	64
Stover, Virgil E.	106	51
Stow, Robert M.	90	45
Stoyka, Charles	126	54
Stoyka, Michael R.	222	85
Straith, Richard E.	222	85
Strand, Martin E.	222	85
Strang, Ruth H.	218	68
Straschnov, Geo. J.	218	68
Stratton, Donald P.	162	56
Strauss, Ernest G.	222	85
Strayer, John W.	26	37
Streat, Rhudolph W.	62	41
Streicher, Robert G.	158	56
Stremler, Bernard J.	174	61
Strempek, Walter F.	90	45
Stricker, Henry D.	222	85
Strickler, D. T., Jr.	222	85
Strickroot, Fred L.	222	85
Stringer, C. J.	90	45
Stringham, James R.	170	57
Strohmenger, Frank J.	34	38
Stroia, Livius N.	22	36
Strom, Arthur W.	78	43
Strong, James P.	182	61
Strong, Leroy E.	106	51
Strong, Wm. F.	182	61
Stronski, G. E.	222	85
Stroube, John A.	82	43
Stroude, Donald E.	126	54
Stroup, Clayton K.	62	41
Struthers, James N. P.	218	68
Stryker, Homer H.	102	47
Stryker, Joan C.	222	85
Stryker, Oscar D.	126	54
Stryker, Walter A.	222	85
Stuart, Gerhardus J.	106	51
Stubbart, F. James	162	56
Stubbs, Bruce T.	218	68
Stubbs, Clayton T.	222	85
Stubbs, Harold W.	222	85
Stubbs, Samuel S.	102	47
Stuber, Roscoe V.	118	52
Stuecheli, Milton B.	174	61
Stuk, Ronald L.	162	56
Stulik, Chas. K.	26	37
Stump, G. D.	14	35
Sturm, Fredk. A.	126	54
Subrin, Mayer	222	85

Name	*County Code*	*Page*
Suen, Irene T. S.	222	85
Sugar, H. Saul	222	85
Sugar, Saml	98	46
Sugarman, Marcus H.	222	85
Sugayan, Norberto A.	222	85
Sugg, Cullen E.	106	51
Sugiyama, Tetsuo	106	51
Suksta, Adolph W.	126	54
Sulfridge, Hugh L., Jr.	190	63
Sullivan, Hugh A.	222	85
Sullivan, M. R.	62	41
Sullivan, Paul J.	222	85
Sullivan, Paul M.	174	61
Sullivan, Thomas M.	222	85
Sultzman, L. Carl	222	85
Summers, Wm. A.	222	85
Summers, Wm. S.	222	85
Sun, Keh Ming	106	51
Sundell, Edwin C.	90	45
Sundin, Paul W.	214	65
Surrell, Matthew A.	122	52
Sutherland, Jacob M.	222	85
Sutherland, James K.	62	41
Sutter, William F.	138	54
Sutton, Geo. D.	62	41
Sutton, Palmer E.	174	61
Sutton, Raymond L., Jr.	22	36
Suwinski, Raymond H.	222	85
Suzuki, M.	126	54
Swan, Donald C.	222	85
Swan, Jerome W.	106	51
Swan, Lionel F.	222	85
Swann, Raymond O.	102	47
Swanson, Alfred B.	106	51
Swanson, Carl W.	222	85
Swanson, Ewald C.	210	65
Swanson, Raymond E.	162	56
Swanson, Robert G.	222	85
Swartz, Fred G.	70	42
Swartz, Fred G., Jr.	222	85
Swartz, Fredk. C.	90	45
Sweda, George P.	162	56
Swedenburg, Robert D.	162	56
Sweeney, Bernard J.	70	42
Sweeny, Donald N., Jr.	222	85
Sweet, Irwin	22	36
Sweet, Robert B.	218	68
Swenson, Harold C.	106	51
Swenson, Leland L.	162	56
Swickle, Edward F.	174	61
Swingle, Norman E.	174	61
Switzer, Bertrand C.	222	85
Syphax, Charles S.	222	85
Szappanyos, Bela J.	174	61
Szappanyos, G. G.	222	85
Szilagyi, D. Emerick	222	85
Szybko, Valentine	174	61
Taber, Rodman E.	222	85
Tactac, Albert J.	222	85
Taheri, Zia E.	22	36
Talanda, Edmund	102	47
Talbot, Frank G.	222	85
Talbott, Timothy M.	106	51
Tallant, Edward J.	222	85
Talley, Robert W.	222	85
Talmers, Fredk. N.	222	85
Tamblyn, E. J.	222	85
Tamblyn, Fredk. W.	90	45
Tan, Elaine Hartje	174	61
Tan, King L.	174	61
Tanay, Emanuel	222	85
Tang, Gene D.	62	41
Tanner, Natalia M.	222	85
Tannheimer, John F.	94	45
Tanton, John H.	170	57
Tapert, Julius C.	222	85
Tarpinian, Dick A.	174	61
Tarpinian, Harry	222	85
Tarr, John	78	43
Tarter, Clyde S.	22	36
Tasker, Helen E.	222	85
Tassie, Ralph N.	222	85
Tate, Cecil E.	98	46
Tatelis, Gabriel A.	222	85
Tatelman, Maurice	222	85
Tauber, Abraham	174	61
Tauscher, John W.	62	41
Taylor, Amos, III	222	85
Taylor, Clifford B.	34	38
Taylor, Fulton B.	218	68
Taylor, Junius L.	222	85
Taylor, Capt. Lee E.	98	46
Taylor, Michael A.	222	85
Taylor, Miles	222	85
Taylor, Nelson M.	222	86
Taylor, Richard A.	222	86
Taylor, Robert E.	190	63
Taylor, Robert M.	170	57
Taylor, Ross V.	98	46
Taylor, Ward M.	222	86
Taylor, Wm. B.	218	68
Taylor, Wm. V.	222	86
Tazelaar, Myron A.	34	38
Tazzioli, Henry A.	222	86
Tear, Malcolm J. J.	222	86
Teed, R. Wallace	218	68
Teitelbaum, Myer	222	86
Telego, A. J.	106	51
Tellez, Henry	222	86
Tellman, H. Clay	162	56
Tenaglia, Thos. A.	222	86
Ten Have, John	106	51
Ten Have, Ralph	186	62
Ten Houten, Charles	214	65
Ten Pas, Henry W.	186	62
Ter Keurst, Donald H.	106	51
Terwilliger, Edwin H.	214	65
Teshima, John Y.	174	61
Tesseine, Arthur J.	106	51
Teusink, James H.	106	51
Teves, Manuel L.	222	86
Texter, Elmer C.	222	86
Thacker, Fredk. R.	70	42
Thaden, D. W.	90	45
Thalner, Leonard F.	98	46
Thamarus, W. E., Jr.	154	55
Thayer, Earl A.	98	46
Theisen, Nikolaus J.	50	39
Theodore, Paul G.	106	51
Theuerle, Walter I.	62	41
Thieme, Elliott T.	218	68
Thieme, Siegfried W.	162	56
Thimmig, Robert F.	90	45
Thirlby, Richard L.	70	42
Thomas, Alfred E.	222	86
Thomas, Blanche M.	222	86
Thomas, James A.	30	37
Thomas, Leon D.	222	86
Thomas, L. Murray	222	86
Thompson, Alden S.	218	68
Thompson, Alfred A.	126	54
Thompson, Arthur B.	190	63
Thompson, Arthur L.	222	86
Thompson, Athol B.	106	51
Thompson, Charles A.	62	41
Thompson, Chas. F.	42	38
Thompson, Edward C.	106	51
Thompson, Frank D.	106	51
Thompson, George R.	218	68
Thompson, Hugh O.	222	86
Thompson, Jack W.	62	41
Thompson, Thos. W.	122	52
Thompson, T. B.	98	46
Thompson, Walter C.	34	38
Thompson, Wm. A.	222	86
Thoms, Peter S.	62	41
Thomson, Danl. C.	222	86
Thorburn, Grant	62	41
Thorley, Lawrence	222	86
Thornton, Eugene S.	162	56
Thornton, Jerry A.	222	86
Thosteson, Geo. C.	222	86
Threatt, Barbara A.	218	68
Thumann, Robert C.	222	86
Thumim, Sadie	222	86
Tiedke, Gunther E.	190	63
Tien, Hsin Chen	90	45
Tierney, Thomas D.	174	61
Tiffany, Jos. C.	106	51
Timma, Richard J.	222	86
Timmerman, Eugene C.	186	62
Timreck, Harold A.	150	55
Ting, Yoeh Ming	222	86
Tinkey, L. Leo	126	54
Tipton, John B.	218	68
Tisdel, James H.	194	64
Tiziani, Joseph J.	218	68
Tkaczuk, Dmytro	222	86
Toal, Robert E.	222	86
Tobar, Rodrigo R.	222	86
Tobin, James F., Jr.	134	54
Todoroff, Theodore G.	222	86
Tofteland, Elmer H.	62	41
Tolbert, Vassal G.	222	86
Tomatis, Luis A.	106	51
Tomlinson, Ledyard H.	158	56
Tompkins, Dana A.	22	36
Tomsu, Chas. L.	222	86
Tomsu, Glenn F.	194	64
Tongco, Rustico C.	174	61
Topp, E. Robert	10	35
Topp, Elwin W.	10	35
Torgerson, Thos. S.	174	61
Torgerson, Wm. R.	106	51
Tornberg, Gordon C.	226	68
Torp, Raymond T.	222	86
Torres, Estelle P.	222	86
Torres, Raul M., Jr.	222	86
Torrey, R. K.	162	56
Toteff, Robert J.	190	63
Touma, Alfred	174	61
Tourkow, Lawrence P.	222	86
Tourney, Garfield	222	86
Tourtellotte, W. W.	218	68
Tower, Rita B.	62	41
Towey, John W.	146	55
Townley, Chas. O.	194	64
Townsend, Frank M., Jr.	222	86
Townsend, Jack H.	106	51
Townsend, James W.	98	46
Towsley, Harry A.	218	68
Towsley, Wilbur D.	154	55
Toy, Chas. M.	162	56
Tracey, John M.	222	86
Tracy, Edward G.	222	86
Trader, Kenneth N.	222	86
Trager, Frederick C.	90	45
Tramitz, Melvin E.	190	63
Transue, David	126	54
Trapasso, Tony J.	42	38
Trapp, Donald G.	78	43
Treadway, Gaylord	22	36
Tregenza, Wm. K.	174	61
Treisman, E. J.	222	86
Tremain, Harold L.	222	86
Trescott, Robert F.	90	45
Trick, O. L.	206	64
Trimby, Robert H.	90	45
Triska, Franz K.	222	86
Troester, Geo. A.	222	86
Trombino, James F. V.	222	86
Tromp, Jack L.	18	35
Troost, Franklin L.	90	45
Troske, Robert L.	106	51

Name	*County Code*	*Page*
Trotsky, Martin B.	222	86
Truba, Paul K.	222	86
Trudgen, Paul E.	222	86
Trump, Paul L.	54	39
Trumpour, Donald J.	174	61
Trunsky, Ronald E.	222	86
Truog, Clarence P.	106	51
Trupiano, Samuel	222	86
Trythall, S. W.	222	86
Tseng, George T. C.	222	86
Tsiatalas, George	174	61
Tukel, Floyd S.	222	86
Tulloch, John A.	222	86
Tulloch, John C.	222	86
Tupper, Chas. J.	218	68
Tupper, Robert L.	174	61
Tupper, Roy D.	222	86
Turcke, Allen F.	62	41
Turcotte, J. G.	218	68
Turcotte, V. J., Jr.	106	51
Turcotte, Vincent J.	222	86
Turkel, Henry	222	86
Turman, Ramon D.	222	86
Turnbull, Jack V.	222	86
Turner, Edward T.	222	86
Turner, John J.	26	37
Turner, Merald G.	62	41
Turner, Phillip R.	86	43
Turner, Rachel E.	222	86
Turner, Robert R.	222	86
Tuttle, Terence K.	190	63
Tuuri, Arthur L.	62	41
Tweedie, G. Evans	202	64
Tweedie, S. Martin	202	64
Tworek, Taisja Z.	222	86
Tygart, Robert L.	42	38
Tyler, Wm. H.	162	56
Tyson, James L.	142	54
Uddyback, Odie T.	222	86
Uhland, Hugo	154	55
Uhlich, Gustav A.	170	57
Ujda, Chester J.	222	86
Ulgenalp, Attila O.	174	61
Ulmer, Arthur A.	222	86
Ulmer, Arthur H., Jr.	194	64
Ulmer, George	154	55
Ulrich, Elmer E.	222	86
Ulrich, John L.	222	86
Ulrich, Willis H.	222	86
Ulveling, Robert A.	174	61
Underhill, Wm. G.	190	63
Unkefer, Wm. T.	222	86
Upjohn, E. Gifford	102	47
Upjohn, Harold	102	47
Urban, Eva	90	45
Urbancic, William	126	54
Urich, Vernon	62	41
Urist, Martin J.	214	65
Urist, Maurice D.	26	37
Urrea, Luis H.	222	86
Urwiller, K. L.	174	61
Usndek, Harold E.	222	86
Vail, Harry F.	22	36
Vaitas, Otonas	222	86
Vaitkevicius, V.	222	86
Valantiejus, John A.	26	37
Valdesuso, R. I.	222	86
Valdmanis, F.	106	51
Valenzuela, E. Valdes	222	86
Valvekens, F. G. P.	222	86
Van Alst, Dennis E.	226	68
Van Appledorn, C. J.	186	62
Van Arendonk, Gerald	102	47

Name	*County Code*	*Page*
Van Ark, Bert	58	39
Van Ark, Herman F.	58	39
Van Arsdale, Wm. L.	222	86
Vanasupa, P.	22	36
Van Auken, Edward W.	142	54
Van Becelaere, L. A.	222	86
Van Bree, Raymond S.	106	51
Vanbrocklin, J. D.	218	68
Van Dam, Forrest R.	106	51
Van De Leuv, John H.	174	61
Van Dellen, Jerrian	170	57
Vanden Berg, A. R.	106	51
Vanden Berg, H. J., Jr.	222	86
Vanden Berg, Henry J.	106	51
Vanden Berg, Kenneth	174	61
Vanden Berg, Robert J.	106	51
Vanden Berg, Tunis	166	57
Vandenberg, Wm.	106	51
Vandenberg, Wm. O.	106	51
Vander, Seymour A.	174	61
Vander Berg, Edwin E.	186	62
Vander Kamp, Harry	34	38
Van Der Kolk, Bert	10	35
Vander Kolk, K. J.	106	51
Vander Meer, Raymond	106	51
Vandermolen, John	106	51
Vander Ploeg, Robert A.	106	51
Vander Ploeg, Wm. H.	106	51
Van Der Veer, Corwin G.	106	51
Vandervelde, C. A.	162	56
Vander Velde, K. M.	102	47
Van Der Velde, Otto	186	62
Vander Voord, Gerald	10	35
Vander Voort, Wm. V.	34	38
Vander Yacht, W. C.	222	86
Vanderzalm, T. P.	90	45
Vande Waa, Alfred J.	186	62
Van Dommelen, G. M.	106	51
Van Duine, Henry J.	106	51
Van Dusen, Chad A.	114	52
Van Duyne, Fredk. W.	62	41
Van Duzen, Verne L.	218	68
Van Dyke, Harold E.	106	51
Van Eck, James E.	222	86
Van Etten, Donald D.	106	51
Vangelder, Wm. C.	162	56
Van Goor, Kornelius	106	51
Van Harn, Raymond S.	62	41
Van Hise, L. Z. R.	26	37
Van Hoek, Donald E.	222	86
Van Kolken, P. J.	186	62
Van Krimpen, Carl E.	186	62
Van Oosten, Howard E.	150	55
Van Otteren, G. F.	106	51
Van Portfliet, Paul	106	51
Van Raaphorst, L. F.	222	86
Van Reesema, F. S.	218	68
Van Riper, Paul	134	54
Van Schoick, Frank	98	46
Vanschoick, R. M.	98	46
Vanselow, Neal A.	218	68
Vansickle, Robert L.	174	61
Van Slyck, E. J.	222	86
Vansolkema, Andrew A.	106	51
Van T Hof, Albert	106	51
Vanvalzah, Henry J.	222	86
Van Vliet, Peter D.	106	51
Van Wagnen, F. L., Jr.	98	46
Van Woerkom, Danl.	106	51
Van Zoeren, Jay J.	174	61
Van Zwalenburg, B. R.	106	51
Varbedian, Thos. G.	174	61
Vardon, Edward M.	222	86
Varley, Alan B.	102	47
Varner, Carol	90	45
Varney, Howard L.	62	41
Vasquez, Andres H.	26	37
Vastine, Russell J., Jr.	26	37
Vasu, C. Mark	106	51

Name	*County Code*	*Page*
Vasu, Vasile O.	222	86
Vaughan, Edgar J.	62	41
Vaughan, Willard R.	10	35
Vaughn, Charles	126	54
Vaughn, Clarence B.	222	86
Vaught, Richard K.	174	61
Vecchio, Thomas J.	102	47
Veenschoten, Girard	10	35
Veenstra, Bernard M.	186	62
Veldhuis, Andrew H.	74	42
Veldman, Harold E.	106	51
Veling, William F.	222	86
Velten, Hubert P.	90	45
Veltman, Jay H.	106	51
Veluswamy, V. P.	174	61
Vence, Carlos A.	222	86
Venema, Jay R.	106	51
Venier, Anton G.	42	38
Venier, Jos. H.	90	45
Vera, Ramon W.	222	86
Ver Duin, John W.	186	62
Vergith, L. William	62	41
Verhage, Martin D.	102	47
Verity, Lloyd E.	34	38
Verkaik, Peter John	186	62
Ver Lee, Jimmie J.	106	51
Ver Meulen, John	106	51
Ver Meulen, Peter	106	51
Verwys, A. L. Hubert	106	51
Vetne, Gunnar	34	38
Victor, Jay	222	86
Victoria, M. A.	174	61
Villaflor, Rady I.	222	86
Villani, Patrick A.	222	86
Villarosa, Isaias S.	222	86
Villarreal, V.	62	41
Villegas, Alfonso A.	190	63
Vincent, Charles C.	222	86
Vincent, John H.	190	63
Vincent, John W.	222	86
Vining, Keats K., Jr.	106	51
Vipond, W. Fraser	222	86
Vis, William R.	106	51
Viscomi, Geo. J.	222	86
Visscher, Donald W.	222	86
Visscher, H. C.	106	51
Visscher, Robert D.	106	51
Visser, Earl R.	106	51
Vitu, Robert L.	190	63
Vivirski, Edward E.	98	46
Vogel, Anton	106	51
Voikos, George A.	162	56
Vokes, Milton D.	222	86
Volderauer, John C.	102	47
Volk, Vladimir K.	190	63
Volkel, James S.	106	51
Vonberg, Vollrad J.	222	86
Vonder Heide, Elmore C.	222	86
Vonglahn, Noel A.	222	86
Von Lackum, L. F.	74	42
Von Renner, Otto	210	65
Vonvaltier, C. C.	174	61
Von Valtier, Wm. F.	174	61
Vorwald, Arthur J.	222	86
Voss, John A.	106	51
Vossler, Albert E.	222	86
Votaw, May Louise K.	218	68
Vrbanac, John J.	178	61
Vreede, P. D.	218	68
Vroon, John	106	51
Vyn, Jay D.	106	51
Wade, Franklin V.	62	41
Wadley, Ralph	90	45
Waehneldt, Niels R.	174	61
Wagar, Spencer H.	158	56
Wagenaar, Edward H.	162	57

Name	County Code	Page
Wagenberg, Harold R.	222	86
Wagener, Creighton A.	70	42
Waggoner, Lyle G.	222	86
Waggoner, R. Walter	218	68
Waggoner, R. W., Jr.	218	68
Waggoner, Richard L.	74	42
Wagner, John R.	222	86
Wagner, Ruth E.	174	61
Wagoner, Darwin E.	14	35
Wagoner, George F.	222	86
Wahby, Elmer F.	106	51
Wahl, Richard A.	222	86
Wainger, Max J.	222	86
Wainright, James W.	90	45
Wainstock, Michael A.	222	86
Waite, Barry F.	190	63
Wake, Douglas L.	174	61
Wakeman, Everal M.	222	86
Walcott, Carver G.	62	41
Waldbott, Geo. L.	222	86
Walden, Robert E.	174	61
Waldron, Alexander M.	218	68
Walker, Chas. S.	34	38
Walker, Enos G.	118	52
Walker, Frank B., II	222	86
Walker, Geo. L.	222	86
Walker, James D.	62	41
Walker, John S.	102	47
Walker, Leo W.	90	45
Walker, Robert M.	222	86
Walker, Sidney C.	194	64
Walkowiak, Robert G.	222	86
Wall, David R.	134	54
Wallace, Donald B.	174	61
Wallace, Silas W.	222	86
Wallack, Erwin N.	174	61
Waller, John P.	222	86
Wallman, C. Harry	74	42
Wallner, Julius M.	218	68
Walma, Daniel	106	51
Walser, Howard C.	222	86
Walsh, Peter R.	190	63
Walt, Alexander J.	222	86
Walter, Arthur W.	222	86
Walter, Daniel L.	62	41
Walter, Floyd J.	222	86
Walters, James E.	142	54
Walters, John F.	34	38
Walters, Wm. Donald	34	38
Walton, Nathaniel J.	30	37
Wang, Charles	186	62
Wang, Chun Heng H.	222	86
Wang, Joy Ya Hsiang	222	86
Wang, Stella K. C.	118	52
Wangner, William F.	174	61
Ward, Nell M.	62	41
Ward, W. Paul	174	61
Ware, J. Raleigh	194	64
Warner, Fredk. H. O.	174	61
Warnke, Robert D.	102	47
Warren, Aaron K.	38	38
Warren, Bernice K.	222	86
Warren, Irving A.	222	86
Warren, Max W.	222	86
Wass, Henry C.	194	64
Wass, Richard A.	222	86
Wasserman, Harold	222	86
Wassermann, Lewis C.	222	86
Wassink, Jerome H.	186	62
Wassink, Roger N.	106	51
Waszak, Chas. J.	222	86
Waterman, Donald F.	106	51
Waters, Duane L.	50	39
Waters, William L.	222	86
Watkins, Richard D.	218	68
Watkins, Richard W.	26	37
Watkins, T. M.	14	35
Watson, Ernest H.	218	68
Watson, Harwood G.	222	86
Watson, James E., Jr.	222	86
Watson, Robert M.	174	61
Watson, Thos. Y.	174	61
Watts, Fredric	174	61
Watts, Fredk. B.	222	86
Watts, John C.	222	86
Watts, Jos. C.	222	86
Way, John H.	22	36
Wayne, Morris A.	222	86
Weadon, Preston S.	102	47
Weaver, Arthur	174	61
Weaver, Clarence E.	222	86
Weaver, Delmar F.	222	86
Weaver, William F.	174	61
Webb, Clarence F.	106	51
Webb, Joseph P.	102	47
Webb, Walter L.	190	63
Webber, Jerome E.	106	51
Webber, Lynn T.	174	61
Weber, Karl W.	222	86
Weber, Richard C.	222	86
Weber, Richard E.	222	86
Weber, Robert M.	62	41
Webster, Jean H.	170	57
Webster, J. C.	202	64
Webster, Jeremy D.	222	86
Webster, John E.	222	86
Weburg, Kathryn D.	170	57
Wechsler, Norman	174	61
Weckesser, W. C.	194	64
Weckstein, Marvin S.	222	86
Wedding, Erling S.	42	38
Weddon, Edward R.	98	46
Wedeking, Fred L.	102	47
Weeber, Thomas A.	106	51
Weed, Milton R.	222	87
Weeks, Vernon L.	158	56
Wegman, Myron E.	218	68
Wegrzyn, George C.	174	61
Wehenkel, Albert M.	222	87
Wehner, Merle E.	50	39
Wehr, Maurice B.	222	87
Wehrenberg, R. A.	106	51
Weidner, Harold R.	30	37
Weidner, John H.	222	87
Weih, Jack E.	70	42
Weiksnar, John F.	222	87
Weiner, Allen D.	222	87
Weiner, Maurice B.	222	87
Weingarden, David	222	87
Weinkauf, Wm. F.	206	64
Weinstein, Jacob	222	87
Weintraub, G. S.	174	61
Weintraub, Rosalyn H.	174	61
Weisberg, A. Allen	222	87
Weisberg, Harry	222	87
Weisberg, Jacob	222	87
Weisenthal, Irvin I.	222	87
Weisheit, Heinz R.	198	64
Weisman, Lawrence S.	174	61
Weisman, Raoul L.	218	68
Weiss, Arno W.	190	63
Weiss, Casimir P.	222	87
Weiss, Chas. F.	218	68
Weiss, Jack I.	126	54
Weiss, Morris	174	61
Weissman, Fredrick	222	87
Weitz, Harry L.	70	42
Welch, John H.	222	87
Weller, John M.	218	68
Weller, Keith E.	106	51
Wellman, John M.	90	45
Wells, Herschel J.	222	87
Wells, Kenneth N.	186	62
Wells, Martha L.	222	87
Wells, S. Merrill, Jr.	106	51
Welsh, Gary J. O.	222	87
Weltman, Carl G.	222	87
Wemmer, Keith S.	34	38
Wencke, Carl G.	34	38
Wendling, Dieter	174	61
Wendt, Vernon E.	106	51
Wenner, Wm. F.	102	47
Wenokur, Milford E.	222	87
Wentworth, John E.	62	41
Wentz, Patricia	114	52
Wenzel, Jacob F.	222	87
Werle, Peter P.	222	87
Werness, Inga W.	62	41
Wertz, Wm. J.	222	87
Wessels, Robert R.	174	61
West, Chas. Carl	90	45
West, George A.	62	41
West, Howard J.	222	87
West, Malcolm E.	222	87
Westcott, Geo. W.	218	68
Westendorp, Floyd	106	51
Westerberg, Martha R.	218	68
Westerhoff, Robert J.	106	51
Westervelt, H. O.	26	37
Westfall, Edwin J.	174	61
Westlund, Norman	190	63
Westmaas, Wm. J.	174	61
Weston, Bernard	222	87
Weston, Claude L.	206	64
Weston, Earl E.	222	87
Weston, Horace L.	222	87
Westover, Chas. J.	218	68
Westphal, Harry O.	154	55
Westrate, Warren K.	186	62
Westrate, Wm, Jr.	186	62
Westrate, Wm., Sr.	186	62
Wetterstroem, Robert G.	218	68
Weyher, Russell F.	222	87
Whale, Edmund H.	218	68
Whalen, Neil J.	222	87
Whaley, Robert L.	222	87
Wharton, Thos. V.	222	87
Wheatley, Charles E.	222	87
Wheeler, J. D.	62	41
Wheeler, Stewart C.	222	87
Whelan, Jos. L.	222	87
Whinery, Jos. F.	106	51
Whipple, Arno	50	39
White, Carl H.	62	41
White, Daniel B.	222	87
White, Donal L.	222	87
White, Donald H.	222	87
White, Frank T.	62	41
White, Jacob E.	222	87
White, John A.	142	54
White, John D.	218	68
White, Milton W.	222	87
White, Prosper D.	222	87
White, Robert B.	114	52
White, Robert H.	174	61
White, Theodore M.	222	87
White, Warren G., Jr.	162	57
Whitehead, Leston S.	222	87
Whitehead, Walter K.	222	87
Whitehouse, Fred W.	222	87
Whitehouse, John D.	106	51
Whitehouse, Keith H.	114	52
Whitehouse, W. W.	218	68
Whiteley, Robert K.	222	87
Whitelock, Edward H.	222	87
Whites, Jack C.	62	41
Whitley, Alee	126	54
Whitman, James E.	222	87
Whitney, Elmer L.	222	87
Whitrock, Robert M.	222	87
Whittaker, Alfred H.	222	87
Whitten, James I.	222	87
Whittenberger, R. N.	106	51
Wholihan, John W.	98	46
Whowell, Marianne	218	68
Wiant, John L.	174	61
Wible, Chas. F., Jr.	86	43

Name	County Code	Page
Wicht, Paul J.	218	68
Wickert, Leo R.	74	42
Wickham, Woodward A.	98	46
Wickstrom, Geo. B.	206	64
Wiechowski, Henry E.	222	87
Wiegenstein, John G.	90	45
Wiegerink, Lloyd T.	150	55
Wienczewski, T. W.	14	35
Wiener, Israel	222	87
Wiener, Morton J.	222	87
Wiersma, Silas C.	162	57
Wiese, John L.	106	51
Wietersen, Fred K.	222	87
Wigent, Ralph D.	174	61
Wiggins, Ira W.	78	43
Wikiera, Edward S.	222	87
Wilcox, K. R., Jr.	90	45
Wilcox, Leslie F.	222	87
Wilcox, Paul H.	70	42
Wilcox, Rex A.	74	42
Wild, David A.	130	54
Wilde, Maurice M.	126	54
Wilderom, Morris	106	51
Wildgen, Bernard C.	162	57
Wilensky, Thos.	90	45
Wiley, D. Bruce	126	54
Wiley, Philip K.	70	42
Wilhelm, Daniel J.	194	64
Wilhelm, Rudolf E.	222	87
Wilhelm, Seymour K.	222	87
Wilke, Carl A.	162	57
Wilkes, John B.	106	51
Wilkins, Robert B.	222	87
Wilkins, Rolland W.	158	56
Wilkinson, Arthur P.	222	87
Wilkinson, C. A.	106	51
Wilkinson, Wm. C.	174	61
Willard, Robert H.	62	41
Willard, Rodney E.	222	87
Wille, Warren S.	98	46
Williams, Chas. R.	70	42
Williams, Dale L.	162	57
Williams, Delford G.	222	87
Williams, Earl R.	222	87
Williams, Edward V.	162	57
Williams, Eugene W.	222	87
Williams, Howard R.	218	68
Williams, John H.	222	87
Williams, John P.	174	61
Williams, John R.	106	51
Williams, Marshall S.	82	43
Williams, Reginald G.	134	54
Williams, Robert J.	158	56
Williams, T. Wendell	62	41
Williams, Wm. S.	62	41
Williamson, Edwin M.	102	47
Williamson, Fredk. B.	218	68
Williamson, W. A.	222	87
Willis, Maurice E.	174	61
Willis, Park W., III	218	68
Willis, Robert E.	62	41
Willis, Robert L., Jr.	222	87
Willison, Chas. H.	154	55
Willits, Clayton O.	58	39
Willits, Robert A.	86	43
Willoughby, Gordon W.	70	42
Willoughby, William A.	222	87
Wills, Thos. N.	62	41
Willson, Dean	26	37
Willson, Howard S.	90	45
Willson, J. Robert	218	68
Wilner, Freeman M.	222	87
Wilner, Irvin A.	222	87
Wilson, Andrew G.	222	87
Wilson, B. David	162	57
Wilson, Chas. S.	14	35
Wilson, Clinton W.	26	37
Wilson, Doyle E.	102	47
Wilson, Earl C.	74	42

Name	County Code	Page
Wilson, Francis M.	222	87
Wilson, Geo. C.	114	52
Wilson, George M., Jr.	134	54
Wilson, Gerald A.	222	87
Wilson, Gerald S.	222	87
Wilson, Ian D.	222	87
Wilson, J. Leroy	218	68
Wilson, John R.	106	51
Wilson, Merton C.	222	87
Wilson, Norman R.	126	54
Wilson, Robert F.	222	87
Wilson, Robert J.	106	51
Wilson, Thos. C.	22	36
Wilson, William S.	218	68
Wimmer, Helmut	222	87
Winfield, Emery D.	106	51
Winfield, Raymond J.	202	64
Winkler, Henry J.	82	43
Winkler, James M.	218	68
Winnick, Lawrence C.	222	87
Winslow, Sherwood B.	34	38
Winter, Garrett E.	106	51
Winter, John K.	186	62
Winter, Wm. G., Jr.	186	62
Winton, Geo. J.	222	87
Wischman, Charles L.	218	68
Wise, Robert	30	37
Wise, Robert K.	222	87
Wise, Warren A.	26	37
Wiseman, Bertha A.	10	35
Wishropp, Edward A.	222	87
Wisniewski, E. M.	174	61
Withey, Grant J.	222	87
Wittenberg, Arthur A.	222	87
Wittenberg, D. H.	222	87
Wittenberg, Samson S.	222	87
Wittenberg, Sydney S.	222	87
Witter, Jos. A.	222	87
Witus, Carl	126	54
Witus, Morris	222	87
Wlodarczyk, A. J.	222	87
Wohlfeil, Dwayne L.	74	42
Wohlrabe, J. C.	162	57
Wolcott, Nan D.	62	41
Wolf, Ervin	126	54
Wolf, Marvin B.	114	52
Wolf, Melvyn D.	62	41
Wolfe, John N.	222	87
Wolfe, Kenneth P.	74	42
Wolfe, Max O.	222	87
Wolfe, Warren E.	174	61
Wolfgram, Lavern V.	70	42
Wolfman, Earl F., Jr.	218	68
Wolfson, William Q.	222	87
Wollum, Arnold	54	39
Wolodzko, Joseph	222	87
Wolter, James C.	222	87
Wolter, J. Reimer	218	68
Wolters, Burton J.	106	51
Womack, Melisande	222	87
Wonacott, Robert C.	70	42
Wood, Alfred L.	222	87
Wood, Cornelius B.	74	42
Wood, Douglas J.	222	87
Wood, John M.	74	42
Wood, Kenneth A.	222	87
Wood, Merle C.	178	61
Wood, Warren A., Jr.	174	61
Wood, Wilford C.	222	87
Woodburne, Harris L.	22	36
Woodburne, R. T.	218	68
Woodbury, Ralph F.	222	87
Woodford, Hackley E.	26	37
Woodley, Bernard J.	222	87
Woodruff, Calvin W.	218	68
Woods, Joseph J.	222	87
Woods, Scott W.	218	68
Woodsides, K. T.	62	41
Woodward, Hanna L.	174	61

Name	County Code	Page
Woodward, Robert D.	174	61
Woodworth, Edwin S.	118	52
Woolfenden, Jos. B.	222	87
Woomer, Donald F.	190	63
Worgess, Duane R.	34	38
Work, Walter P.	218	68
Worrell, Calier H.	222	87
Worth, Melissa H. C.	218	68
Worthington, Ralph	90	45
Wortley, Chas. K.	90	45
Worzniak, Jos. J.	222	87
Wreggit, Winston R.	222	87
Wright, Charles H.	222	87
Wright, Donald R.	62	41
Wright, Edwin M.	190	63
Wright, Geo. W., Jr.	62	41
Wright, Harold L.	218	68
Wright, J. K.	70	42
Wright, Kenneth C.	134	54
Wright, Thomas B.	22	36
Wright, Thos B.	106	51
Wu, Clyde Ying Chau	222	87
Wu, Jack F.	102	47
Wunsch, Richard E.	70	42
Wurz, John F.	106	51
Wyatt, Rudolph A.	222	87
Wybranowski, Jan	222	87
Wylie, John H.	222	87
Wyman, John S.	218	68
Wyngaarden, Martin K.	106	51
Wynn, Geo. H.	114	52
Wyte, Wm. C.	126	54

Name	County Code	Page
Yamasaki, Ken	126	54
Yang, William G.	102	47
Yannitelli, S. A.	34	38
Yaple, Edward L.	102	47
Yared, Jerome A.	106	52
Yarjanian, Ara	222	87
Yarrows, Morton I.	222	87
Yates, Arthur J. W.	222	87
Yesayian, H. G.	222	87
Yesko, Veldora C.	174	61
Yetzer, Wm. J.	222	87
Yff, John H.	186	62
Ylvisaker, John R.	174	61
Yntema, Stuart	190	63
Yobst, C. James	154	55
Yoder, Orus R.	218	68
Yoder, Robert R.	222	87
Yonkman, Fredk. F.	186	62
Yost, Kenneth W.	194	64
Yost, William G., Jr.	106	52
Yott, Wm. J.	222	87
Young, Arthur R.	174	61
Young, David J.	222	87
Young, Donald A.	222	87
Young, Donald C.	222	87
Young, Donald C.	106	52
Young, Frank A.	222	87
Young, Irving I.	222	87
Young, John	190	63
Young, John Harley	70	42
Young, John R.	34	38
Young, Lloyd B.	70	42
Young, Malcolm C.	162	57
Young, Richard D.	222	87
Young, Viola M.	222	87
Young, Wm. R.	214	65
Youngman, Douglas C.	226	68
Youngs, Cyril A.	102	47
Youngs, John A.	194	64
Youngstrom, Clarence S.	222	87
Younis, Ahmad	94	45
Yull, Arthur B.	194	64
Yun, Bo Sup	102	47

Name	County Code	Page
Zabinski, Edward J.	222	87
Zadeh, A. T.	222	87
Zadvinskis, Z.	106	52
Zager, Bernard S.	222	87
Zako, Louis	222	87
Zaleski, Edward J.	222	87
Zane, Alan Irving	222	87
Zaplitny, R. B.	34	38
Zaplitny, Sophia	34	38
Zara, Sabah E.	222	87
Zarafonetis, C. J. D.	218	68
Zaremba, Aloysius J.	22	36
Zavela, Dan	126	54
Zavell, Paul M.	222	87
Zawacki, Sigmund G.	222	87
Zawadzki, Edward S.	222	87
Zbikowski, Jos.	222	87
Zbikowski, Z. T.	222	87
Zbudowski, Myron R.	222	87
Zeis, Myron G.	62	41
Zelenock, Michael N.	222	87
Zelko, Daniel M.	62	41
Zemaitis, Petras	222	87
Zemens, Jos. L.	222	87
Zemmer, H. R.	110	52
Zerbi, Victor M.	218	68
Zevallos, Carlos	222	87
Zheutlin, Bertram	34	38
Zick, Gerald A.	90	45
Zick, Luther H.	26	37
Ziegler, Robert F.	222	87
Ziel, Hermann A., Jr.	90	45
Zielke, Irwin H.	70	42
Ziliak, Alois L., Jr.	22	36
Zimberg, Leslie L.	222	87
Zimmerman, Jos. G.	70	42
Zimmerman, Walter J.	174	61
Zimmerman, Wm. G.	106	52
Zimont, Charles R.	198	64
Zimont, Raymond D.	198	64
Zindler, Geo. A.	34	38
Zinn, Geo. H.	222	87
Zinterhofer, John	174	61
Zipf, Charles	170	57
Zirkin, Richard M.	222	87
Zobl, Eldred	222	87
Zografov, Nikolas S.	174	61
Zohoury, Nasser	222	87
Zolen, Margaret H.	102	47
Zolliker, Carl R.	110	52
Zolliker, Margaret Z.	222	87
Zook, Mr. Gilbert E.	126	54
Zrull, Joel P.	218	68
Zubroff, Leonard S.	222	87
Zucker, Norman	126	54
Zuelzer, Wolf W.	222	87
Zujko, Alphonse J.	174	61
Zukowski, Henry J.	222	87
Zukowski, Sigmund A.	222	87
Zwemer, Rodger J.	106	52
Zwirkoski, Thaddeus S.	222	87
Zylik, Michael K.	222	87

HACK SHOE CO.

50 years
of
Service to the Profession

1916 — 1966

DOWNTOWN DETROIT
33 East Adams

NORTH END
19360 Livernois Ave.

EAST DETROIT
20901 Kelly Road
(2 blocks N. of 8 Mile)

BIRMINGHAM
235 Pierce St.

KINGSWOOD HOSPITAL, Michigan's finest and newest facility for intensive, short-term treatment of voluntary neuropsychiatric patients.

Philip N. Brown, M.D.
Medical Director

Marvin J. Lawrence, F.A.C.H.A.
Administrator

KINGSWOOD HOSPITAL
10300 W. EIGHT MILE ROAD
FERNDALE 20, MICHIGAN Telephone: Area 313 398-3200

NEW MEMBERS AND ADDRESSES

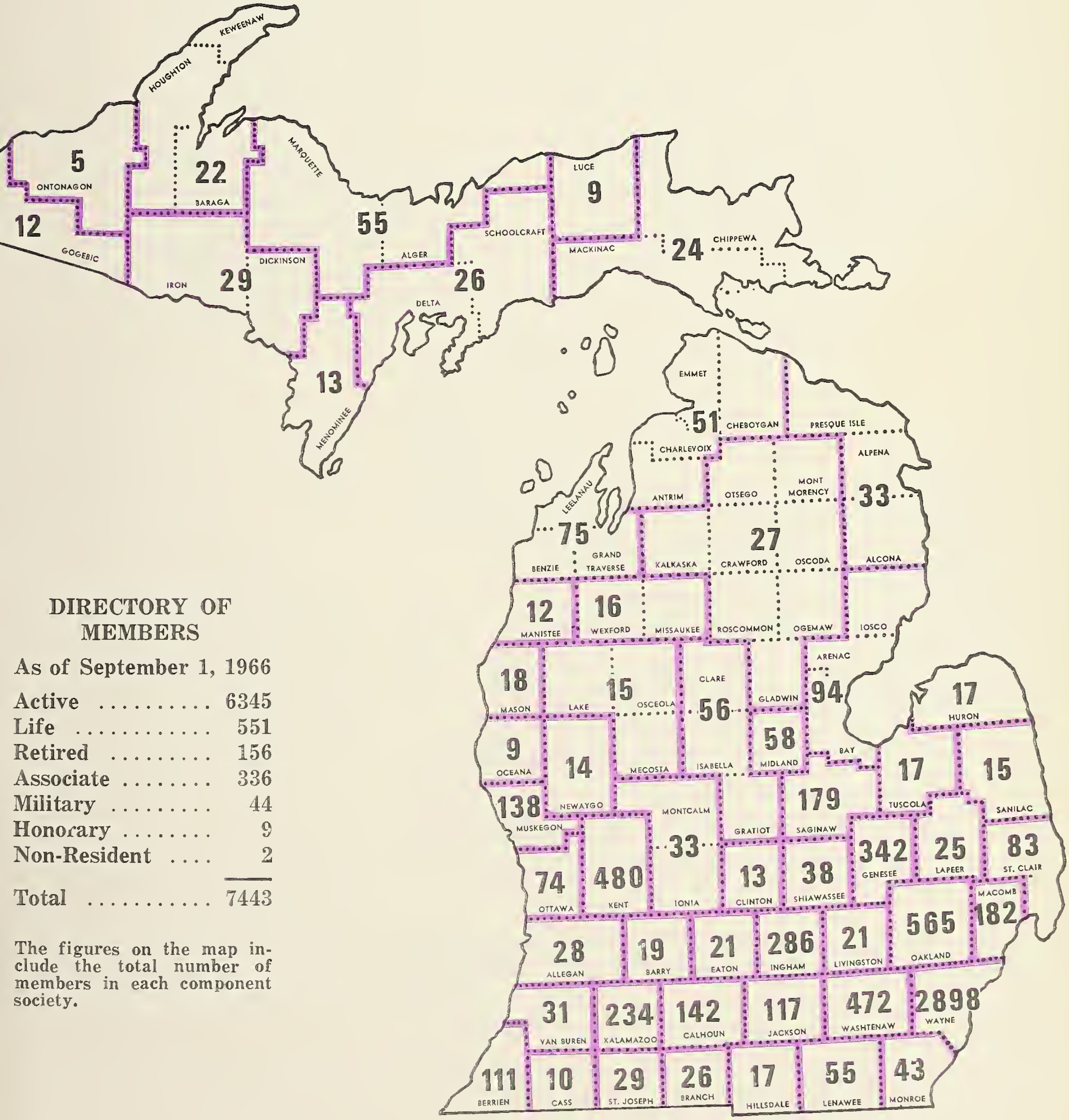
CHANGES OF ADDRESS

Vernors
10
th
ANNIVERSAR
PLUS JE BOIS

Gingery Vernors goes with everything...has for a hundred year

Directory of Members — 1966

The blue lines on the map indicate the boundaries for the component medical societies.

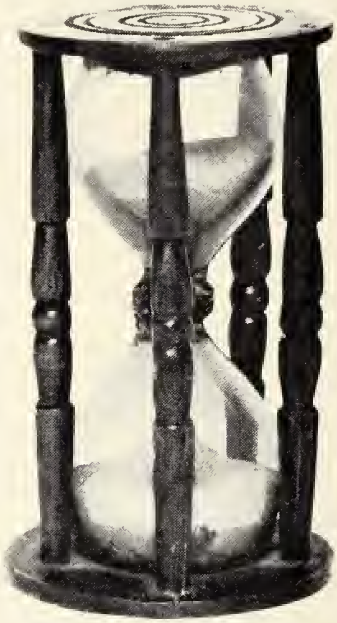

KEWEENAW
HOUGHTON
5
ONTONAGON
22
BARAGA
MARQUETTE
12
GOGEBIC
55
IRON
29
DICKINSON
ALGER
SCHOOLCRAFT
LUCE
9
MACKINAC
24
CHIPPEWA
26
DELTA
13
MENOMINEE
EMMET
51
CHEBOYGAN
PRESQUE ISLE
CHARLEVOIX
ALPENA
MONT MORENCY
33
ANTRIM
OTSEGO
LEELANAU
75
27
BENZIE
GRAND TRAVERSE
KALKASKA
CRAWFORD
OSCODA
ALCONA
12
MANISTEE
16
WEXFORD
MISSAUKEE
ROSCOMMON
OGEMAW
IOSCO
ARENAC
18
MASON
LAKE
15
OSCEOLA
CLARE
56
GLADWIN
94
17
HURON
9
OCEANA
14
58
MIDLAND
BAY
MECOSTA
ISABELLA
17
15
138
NEWAYGO
MUSKEGON
MONTCALM
179
GRATIOT
SAGINAW
TUSCOLA
SANILAC
33
74
OTTAWA
480
KENT
IONIA
13
CLINTON
38
SHIAWASSEE
342
GENESEE
25
LAPEER
83
ST. CLAIR
MACOMB
182
565
OAKLAND
28
ALLEGAN
19
BARRY
21
EATON
286
INGHAM
21
LIVINGSTON
31
VAN BUREN
234
KALAMAZOO
142
CALHOUN
117
JACKSON
472
WASHTENAW
2898
WAYNE
111
BERRIEN
10
CASS
29
ST. JOSEPH
26
BRANCH
17
HILLSDALE
55
LENAWEE
43
MONROE

DIRECTORY OF MEMBERS

As of September 1, 1966

Active	6345
Life	551
Retired	156
Associate	336
Military	44
Honorary	9
Non-Resident	2
Total	7443

The figures on the map include the total number of members in each component society.



TIME HAS PROVED THE WISDOM OF THE GROUP OF PHYSICIANS WHO MET AND CONCEIVED THE BLUE SHIELD IDEA **25 YEARS AGO**

MICHIGAN BLUE SHIEL

DIGEST OF PROCEEDINGS/1966 HOUSE OF DELEGATES

U.C. MEDICAL CENTER LIBRARY
JAN 18 1967
San Francisco 22,

DECEMBER, 1966 SECTION TWO

MICHIGAN MEDICINE

MICHIGAN STATE MEDICAL SOCIETY

1966 House of Delegates Proceedings

101st Annual Session

Michigan State Medical Society

Table of Contents

Page

Call to Order and Special Reports

Call to Order 5
Report of Credentials Committee 5
Invocation 5
Speaker's Remarks 5
Comments and Recommendations from the Judicial Commission 8
President's Address 9
President-Elect's Address 10
Remarks from American Medical Association 12
Report of Woman's Auxiliary to Michigan State Medical Society 13
Report of Michigan State Medical Assistants Society 14
Report of Michigan Delegates to American Medical Association 16
Report of Michigan Medical Service 18

Reports of The Council

Remarks of Council Chairman (supplemental report of The Council) 19
Annual Report of The Council 21

Committee Reports

Annual Reports of Council Committees:

Alcoholism and Drug Addiction 29
Awards 29
Beaumont Memorial 30
Courses on Medical Economics and Ethics 30
Disaster Medical Care 31
Education Liaison 31
Evaluation of Prepaid Medical Services 35
Hospital Relations 35
International Health 36
Liaison with Michigan Crippled Children Commission 36
Liaison with Michigan Hospital Service 36
Liaison with Michigan State Pharmaceutical Association 36
Liaison with Residents, Interns and Senior Medical Students 38
Liaison with State Bar of Michigan 38
Liaison with State Board of Registration in Medicine 38
Liaison with State Executive Office 38
Medical Aspects of Organized Athletics 38

How To Use This Digest

For convenient use of the *Digest of Proceedings*, the following procedure has been used:

Each report or resolution is followed immediately by the action of the reference committee on that report or resolution and then the House action on the report of the reference committee.

TABLE OF CONTENTS

Page

Medicare ... 39
Medicine and Religion ... 39
Michigan Medical History ... 39
Nursing ... 39
Rehabilitation ... 40
Relative Value Study ... 40
Retirement Plan ... 40
Uniform Fee Schedule for Governmental Welfare Agencies ... 41
Veterans Affairs ... 41
Workmen's Compensation ... 41

Annual Reports of Standing Committees:
Advisory to Michigan State Medical Assistants Society ... 41
Advisory to Woman's Auxiliary ... 42
Aging ... 42
Blood Banks ... 42
Cancer ... 42
Cardiac Disease Control ... 43
Child Welfare ... 43
Diabetes ... 44
Governmental Medical Care Programs ... 44
Highway Accident Prevention ... 47
Iodized Salt ... 48
Legal Affairs ... 48
Maternal Health ... 50
Medical Socio-Economics ... 50
Medicine and Osteopathy ... 51
Mental Health ... 51
Occupational Health ... 52
Postgraduate Medical Education ... 52
Professional Insurance Plans ... 53
Public Health ... 53
Public Relations ... 54
Respiratory Diseases ... 57
Rural Medical Service ... 57
Scientific Radio and Television ... 58
Venereal Disease Control ... 58

Reports of House of Delegates Committees:
Certificates of Commendation ... 59
Constitution and Bylaws ... 60
Determine Monetary Value of Unit of Relative Value Scale ... 61
Reapportionment ... 62
Select Michigan's Outstanding Physician ... 62
Study Financial Structure of MSMS ... 62
Study Multi-County Medical Societies ... 65
Study Procedures of the House of Delegates ... 66

Resolutions
1. Four-Year College of Human Medicine at Michigan State University ... 66
2. Immediate State Support for Maximum Development of Medical Training for University of Michigan, Wayne State University and Michigan State University Medical Schools ... 67
3. Reinstate Partnership Billing by Blue Shield ... 67
4. Advance Presentation of Resolutions ... 67
5. Dual Education ... 67

TABLE OF CONTENTS

Page

6. Opposition to Compulsory Use of Generic Names of Drugs 68
7. Pharmacist Review of Hospital Orders 68
8. Educational Program on Crime Prevention 68
9. Revision of PKU Law 68
10. Statewide Policy on Telephone Listings 69
11. Section on Thoracic Surgery 69
12. Support of Drug Industry 69
13. Opposition of Limitation of Doctor's Right to Dispense 69
14. Elimination of Income Levels & Fee Schedules from Blue Shield Policies .. 69
15. Utilization of Medical Societies Committees for Medicare Complaints 70
16. Definition of Customary, Prevailing and Reasonable Fee 70
17. Hospital Progress Notes Sufficient Evidence of Medical Necessity for Medicare 70
18. Legislation Regarding the Practice of Medicine and Osteopathy 70
19. Dues Increase for Augmented Legislative, Governmental and Public Relations Program 71
20. Thanks to the MSMS Woman's Auxiliary for Hosting the Healthmobile during its Yearlong, Statewide Tour of Exhibition 71
21. Commendation of Healthmobile 71
22. Definition of Specialist 72
23. A Concept of Fair and Reasonable Fees 72
24. Approval of Legislative Review of "Healing Arts" Licensure and Practice Laws 72
25. Separation of the MSMS House of Delegates Meeting from the Scientific Fall Session 73
26. Blue Shield Insurance 73
27. Meeting Change for MSMS House of Delegates 73
28. Hospital-Based Specialists 73
29. Usual and Customary Fees 74
30. Medicare Fees 74
31. Expansion of Enrollment in Michigan Medical Schools 74
32. Expansion of the School of Human Medicine at Michigan State University to Four Years 74
33. Driving and Alcohol 74
34. Enactment of a Single Medical Practice Law 75
35. Implementation of Michigan Relative Value Study 75
36. Regarding Future Blue Shield Contracts 75
37. Payment to Specialists Under M-75 75
38. Heart-Cancer-Stroke Program 76
39. Nursing Wage Scale 76
40. Michigan Relative Value Study 76
41. Change of Requirements for Certified Income Status of Policyholders of Michigan Medical Service 76
42. Change of Law Relating to Money or Personal Property of Deceased; Disposition; by Attending Medical Examiner 76
43. Disclosure of Medical Records 77
44. Discrepancy in Fees 77
45. Hospital Utilization Review 77
46. Driving License Evaluation and Examination 77
47. Activity of the AMA in National Legislation 78
48. Nominations for Judicial Commission 78
49. Facilities for the Treatment of Alcoholism 78
50. Prescribing of Medications 78
51. Status of Externes 78

Page
52. Hospital-Based Physicians 79
53. Qualifications of Members on Judicial Commission 79
54. Need for Increased Support of Legislative and Economic Activities of MSMS 79
55. Hospital Privileges 80
56. Commendation to Michigan Blue Shield 80
57. Feasibility of Rotating Membership of the Judicial Commission within Districts 80
58. Suture of Lacerations Billing by Blue Shield 80
59. Establishment of MSMS House of Delegates Committee to Study Resolutions Passed by Other State Medical Society Houses of Delegates 80
60. Acceptance of National Board of Medical Examiners Certifications 81
61. Hospital Staffs and Osteopaths 81
62. Repeal of the Basic Science Law 81
63. Osteopathic Draft 81
64. Michigan Employment Security Commission Amendment 81
65. Commendation to MAP on "Formula" TV series 82
66. Alcoholism as a Disease Entity 82
67. Storm Door Injuries 82
68. Annual Report from Michigan Medical Service on Medicare Costs 82
69. Advisory Committee of The Council to the Executive Director 82
70. Commendation of MDPAC 83
71. Practicing Physician Representation on All AMA Education Committees .. 83
72. Appropriate Recognition of the Sesquicentennial Celebration of the University of Michigan and its Medical School 83
73. Chiropractic Payment 83
74. In Consideration of Our Leadership Responsibilities 83
75. Introduction of Resolutions 84
76. Workshop for Members of the House of Delegates 84
77. Honorary Membership 84
78. Commendation 85
Special Memberships 85

Presentations and Awards

Certificates of Commendation 85
Michigan's Outstanding Physician 86
Fifty Year Awards 86
Special Award 86
Employee Awards 86

Guest Speaker.. 86

Tribute to Deceased Former Members of the House of Delegates........... 86

Elections.. 87

Directory

Delegates — Record of Attendance 87
Reference Committee Personnel 89

Michigan State Medical Society
101st Annual Session
September 25-27, 1966

CALL TO ORDER AND SPECIAL REPORTS

1. Call to Order

The One Hundred First Annual Session of the House of Delegates of the Michigan State Medical Society, held at the Pantlind Hotel, Grand Rapids, Michigan, on September 25-26-27, 1966, convened at 8 p.m., J. J. Lightbody, MD, Speaker of the House, and Louis F. Hayes, MD, Vice-Speaker of the House, presiding.

2. Report of the Credentials Committee

Chairman S. C. Penzotti, MD, reported: "Mr. Speaker, there is a quorum present, the majority of whom are not from any one component society."

3. Invocation

The Speaker called upon Vice-Speaker Hayes to give the invocation.

4. Speaker's Remarks — J. J. Lightbody, MD

Welcome to the One Hundred First Session of the House of Delegates of the Michigan State Medical Society.

Last year at the celebration of our Centennial there were a great number of activities in which the House participated and in spite of these large numbers of extracurricular Centennial activities the House completed its business on time.

This year we renew our interest in the routine business of the House — plus Medicare — plus Medicaid — and related subjects.

For the past several years we have been trying to get resolutions in as early as possible so that the delegates would have time to examine them before arriving for the meetings. It now appears that we have had some impact on county societies and delegates, as we have had a considerable number of resolutions submitted so that they can be duplicated and given to the delegates.

This year we had eight committees appointed by the Speaker and authorized by the House of Delegates, and these committees are submitting their reports to the House. These committees are:

Committee on Certificates of Commendation.
Committee on Constitution and Bylaws.
Committee to Determine Monetary Value of the Unit of the Relative Value Scale.
Committee on Reapportionment.
Committee to Select Michigan's Outstanding Physician.
Committee to Study Financial Structure of the House of Delegates (every three years).
Committee to Study Multi-County Medical Societies.
Committee to Study Procedures of the House.

You will note that two of these committees are to report to the House tonight; this is considered necessary so that certain recipients of honors or their representatives may be notified to be present at a subsequent meeting. The remaining reports will be referred to the reference committees.

This House of Delegates feels deeply the loss of Doctor Bill Hyland, the Chairman of our delegation to the American Medical Association. It will be necessary, of course, to elect a delegate to replace Doctor Hyland to fill his unexpired term which runs through 1967. The delegate so elected will take office immediately and his term will continue through 1967. There is no provision in our Bylaws that covers this particular situation, so the procedure we will follow has been discussed with our Legal Counsel, Mr. Dodd, and it has been decided that the special election to fill the unexpired term of Doctor Hyland will take place immediately after the election of the regular delegates on Tuesday evening.

To correct this situation in our Bylaws, I am recommending to the Committee on Constitution and Bylaws that an amendment be made to Chapter 9, Section 11, to allow for special elections of delegates to the AMA in case of death or resignation of an elected delegate.

As in previous years, we have invited representatives of the junior and senior classes of our medical schools to our Annual Session, and they will be introduced later at an appropriate time. We have also invited the deans of the medical schools — Dr. Hubbard, Dr. Gardner, and Dr. Hunt of M.S.U.

Tomorrow morning at about nine o'clock the Mayor of Grand Rapids, Mayor Sonneveldt, will give welcoming remarks to the House.

In addition, the American Medical Association has sent an official representative to this session of the House of Delegates. He is Mr. Leo Brown, Assistant to the Executive Vice President of the AMA, Doctor Blasingame. Mr. Brown will give a brief address to the House tomorrow morning.

You will note in your Handbook, under Report of the Speaker, a list of items which explains to you what happened to the resolutions that were introduced in the House last year in relation to the action and implementation of these resolutions. I am sure this information will give you considerable insight into the tremendous amount of work, mainly by our staff, that is involved in following through House of Delegates activities.

(The following report of the Speaker was presented to the Delegates in printed form.)

This is a brief review of the implementation of resolutions from the 1965 House of Delegates.

1. *Committee on Governmental Medical Care Programs.* In a substitute for Resolutions 1, 35 and 45, the House directed that the MSMS President appoint a Committee on Governmental Medical Care Programs, to "be concerned with the activities and planning of . . . governmental agencies involved in the medical care field."

This Committee, appointed by President Leader in December, 1965, has carried out its appropriate duties. (See Annual Report of Committee on Governmental Medical Care Programs.)

2. *Commendation to Legislature for Air Pollution Legislation.* Resolutions 2 and 3 recommended that the Michigan Legislature be commended for its passage of certain legislation regarding air pollution. These resolutions were transmitted appropriately to members of the Michigan Legislature.

3. *Hiring of the Handicapped.* Resolution 4 directed that MSMS recommend to the Legislature that legislation be enacted to limit the employer's liability for pre-existing handicaps, by waiver or other means, to encourage hiring of the handicapped.

This resolution was referred by The Council to the Legal Affairs Committee for implementation. No suitable bill was introduced; a bill to create a Commission on Hiring of the Handicapped was supported but did not pass.

4. *Support of Voluntary Approach to Area-Wide Hospital Planning.* A substitute for Resolutions 5 and 16 expressed support for the voluntary approach to areawide hospital planning, and urged formation of committees by component medical societies to initiate local and regional health planning councils.

The Council referred this resolution to MSMS representatives to the Hospital Research and Educational Reserve of Michigan and the Health Facilities Planning Council. It was communicated to component medical societies and MSMS members through *Medigram.*

5. *Principles for Federal Medical Programs.* Resolution 6 reaffirmed MSMS principles regarding medicine's relationship with government, and directed that The Council implement these principles.

The Council referred this resolution to the Committee on Governmental Medical Care Programs for implementation. The Committee, as well as individuals responsible for working with governmental agencies, has used these principles continuously as daily guidelines.

Resolution 7 re MMS Ob.-Gyn. payments and Resolution 28 re MMS Doctor's Service Reports were considered together. The House took no action on either.

The House took no action on Resolution 8 re changing the name of MSMS.

6. *Consolidation of Medicine and Osteopathy.* Resolution 9, expressing support for The Council and its committees in efforts to effect the ultimate consolidation of medicine and osteopathy, was referred to the Committee on Medicine and Osteopathy for information.

Resolution 10 re poll of AMA members was disapproved by the House.

7. *AMA Institute of Continuing Study of the Role of Medicine in Society.* Resolution 11, which proposed such an institute, was referred to the Michigan Delegation to the AMA. At the November, 1965, AMA meeting in Philadelphia, the Michigan Delegation introduced this resolution. Since it was similar to a resolution introduced by North Carolina in June, 1965, it was referred to an AMA study committee for evaluating planning techniques and development. This new study committee was established by the AMA Board of Trustees and concurred in by the House.

8. *Drivers' Tetanus Immunization.* Resolution 12 called for medical information on auto drivers' licenses and for tetanus immunization programs "where needed;" this resolution resulted in the major driver's license sticker program and a massive amount of highly favorable MSMS publicity throughout the entire state; some 300,000 stickers are now in use.

Resolution 13 re tax deduction for medical education costs was disapproved by the House.

9. *Endorsement of Poison Antidote Kit (PAK) Program.* Resolution 14 endorsed this MSPA program and urged that MSMS members be notified of this action. A story regarding this House action was carried in *Michigan Medicine* and members of the Public Relations Committee worked to boost the project in their local areas.

Resolution 15 re utilization committees under Medicare was disapproved by the House.

A substitute for Resolutions 5 and *16* was adopted (see Item 4).

The House took no action on Resolution 17 re use of maternity beds for non-obstetric patients.

10. *Temporary Seating of Alternate Delegates in MSMS House of Delegates.* Resolution 18 directed that the Bylaws be amended to permit the temporary seating of an Alternate Delegate. The appropriate language was developed by the Constitution and Bylaws Committee and inserted in the 1965 edition of the MSMS Constitution and Bylaws.

Resolution 19 re definition of government obligations in public health was not approved by the House.

11. *Joint Committee to Study Training for Medical Assistants.* In Substitute Resolution 20, The Council was instructed to appoint a joint committee "consisting of members from medical societies, medical schools, and the State Board of Education, to consider areas of training, qualifications, and degrees of limitations, and control of medical ancillary personnel, and to investigate and consider the feasibility of developing and implementing a program of training at the college level as medical assistants under medical school supervision." The resolution further directed that AMA be notified of this action and urged to take similar appropriate action on a national level.

The Council referred this resolution to the Education Liaison Committee with the request that it meet with the State Board of Education for this purpose. The Education Liaison Committee studied the resolution and recommended that The Council appoint a special Subcommittee on Education for Medical and Paramedical Personnel. The Subcommittee was appointed with H. J. Meier, MD, Coldwater, as Chairman. The Subcommittee has met and conferred with leaders of the State Board of Education's Committee on Education for Health Care and the Michigan Health Council. Materials have been obtained from state and national medical organizations and from severa medical schools. Development of criteria, etc., is moving forward under the direction of the parent Education Liaison Committee and its new Subcommittee.

12. *Reapportionment of MSMS House of Delegates The Council, and the Michigan Delegation to AMA* Resolution 21 directed the appointment of an ad hoc committee to study geographical distribution of physicians in Michigan and study the feasibility of reapportionmen on a one-man, one-vote basis.

The House of Delegates Committee on Reapportionmen is submitting its report to the House at this meeting (See Annual Report of Committee on Reapportionment.

13. *Study of the Organization of the Medical Profession.* Resolution 22 directed that the Michigan Delegation introduce a resolution in the AMA House of Delegates that it "explore and evaluate the feasibility of reorganization of the American Medical Association, together with state and local medical societies, looking toward the provision of a more effective organization structure to implement the objectives and goals of the medical profession."

This resolution was introduced by the Michigan Delegation at the November, 1965, AMA meeting in Philadelphia, and was referred to a study committee of the AMA Board of Trustees, which was already reviewing several similar resolutions.

14. *Physicians Under Public Law 89-97.* Resolution 23 simply stated the MSMS attitude re participation unde Medicare and required no follow-through.

The House took no action on Resolution 24 re the 1965 Relative Value Study.

15. *Feasibility of Uniformity in Fee Schedules.* Resolution 25 directed The Council to promptly review existing fee schedules and to consider the feasibility of establishing uniformity in payments of all branches of government

The Council referred this resolution to the Committe on Uniform Fee Schedule for Governmental Welfar Agencies, which recommended that The Council, at appropriate times, request all governmental agencies to adopt the 1965 Michigan Relative Value Study with $5.00 conversion factor as the basis of paying for physician services. The Council, having already adopted a simila proposal of the House of Delegates Committee to Determine Monetary Value Unit of the Relative Value Study agreed with this recommendation.

The House took no action on Resolution 26 re estabishing an MSMS Section on Plastic Surgery.

16. *Michigan Medical Service as Fiscal Agent Under ledicare.* Resolution 27 asked that HEW be notified hat MMS should be the "fiscal agent" under PL 89-97. IMS has been made intermediary under Title 18; no lecision has been made under Title 19; MSMS has favored IMS under both.

Resolutions 7 re MMS Ob.-Gyn. payments and Resoluion 28 re MMS Doctor's Service Reports were considered ogether. The House took no action on either.

17. *Change of MSMS Annual Meeting Date.* Resolution 9 referred this matter to "an appropriate committee of he Council for study."

The Council has obtained information about future neeting dates of the various groups that meet annually n September and October. The Council adopted the ecommendation of the Publication Committee that whenver feasible the MSMS Annual Session be held during he last week in September or the first week in October permit component societies to meet prior to the meetng of the House of Delegates.

18. *Appointment of Committee to Study RVS Converion Factor.* Resolution 30 authorized appointment of a louse of Delegates committee to determine when necesary the appropriate conversion factor for the RVS. This ommittee was appointed and set a conversion factor of 5.00 for the RVS. (See Annual Report of the Comnittee.)

19. *Preparation of RVS for Professional Pathology Serves.* Resolution 31 directed that an appropriate comittee prepare a Relative Value Scale for the professional omponent of pathology services.

Discussion between the Relative Value Study Comnittee and officers of the Michigan Society of Pathlogists led to the conclusion that at the present time a athology schedule separating professional fees from cost r overhead factors is not practical. The RVS Committee sked that, should further study by the national societies n this specialty lead to a change in this position, further iscussion be held by representatives of the Michigan ociety of Pathologists and the RVS Committee.

20. *Modernization of Michigan Medical Practice Laws.* esolution 32, which directed that The Council, with the elp of other appropriate MSMS committees, prepare a ill for presentation to the Legislature embodying necesary changes for the modernization of the Michigan nedical practice laws, was referred to The Council "for nplementation at the time which, in its judgment, is nost suitable to attain the greatest good."

The Council referred this resolution to the Legal Afirs Committee. A subgroup of the Board of Registration as been working on this problem and has agreed to reiew its findings with the Legal Affairs Committee before ctually introducing any bill.

21. *Opposition to the Douglas Amendment.* Resolution 3 which opposed this amendment was implemented by ansmitting the opposition of MSMS to appropriate memers of Congress.

The House took no action on Resolution 34 re autonomy f the Michigan Crippled Children Commission.

The House adopted a substitute for Resolutions 1, 35 nd 45 (see Item 1).

22. *Support of Heart-Cancer-Stroke Legislation.* Resoluon 36 supported federal heart-cancer-stroke legislation nder certain conditions. MSMS implemented the resoluon by transmitting its sense to appropriate members of ongress. Since passage of the bill, MSMS has sought to nfluence its implementation in terms of the resolution.

23. *Laboratory Medicine.* Resolution 37 stated that peration of a medical laboratory represents the practice of medicine and that a medical laboratory should be supervised and directed by a licensed physician. This resolution was referred to the Legal Affairs Committee through The Council for implementation and presentation to the Michigan Legislature.

A bill was introduced, was opposed by the State Health Department, and rejected by the Legislature. The effort resulted in agreement to carry out a mutual attempt to develop a suitable bill for next year.

The House took no action on Resolution 38 re official use of the title, "Doctor."

24. *Preparation of RVS to Cover Professional Services for Diagnostic Radiology.* Resolution 39 directed that the Relative Value Study Committee produce a Relative Value Scale for Professional Services Only for Diagnostic Radiology.

The RVS Committee, in consultation with the Detroit Roentgen Ray and Radium Society, has been successful in formulating a separate relative value scale for professional services in the Diagnostic Radiology section of the 1965 Michigan RVS. The final report of the Committee, which will contain this matter plus other suggested modifications of the 1965 Michigan RVS, will be presented to the House of Delegates in September.

25. *Continued Study of MMS Home Care Programs.* Resolution 40 urged Blue Shield to continue its study of Home Care Programs for the purpose of providing physicians' service benefits to subscribers in coordinated Home Care Programs. This resolution was transmitted to Michigan Medical Service.

26. *Statute for "Implied Consent" Provision in Granting Motor Vehicle Drivers' Licenses.* Resolution 41 encouraged enactment of statutes providing for mandatory determination of blood alcohol, or the use of approved breathing tests, on drivers suspected of driving while intoxicated, and protecting doctors who perform such tests from subsequent court action. This resolution was referred to The Council "for implementation at the most opportune time," since the reference committee believed a legislative bill was being prepared which encompassed the intent of the resolution.

The Council referred this resolution to the Legal Affairs Committee, which held to the spirit of this resolution and, when asked, expressed no opposition to implied consent. This, however, has been the basis for a strong partisan-type legislative battle, which could have jeopardized other legislative effort. The result is still in doubt until final conference reports are dealt with.

27. *Continuation Education Programs.* Resolution 42 urged MSMS members to attend and participate in one or more of the continuing education programs offered each year.

This resolution was publicized by an editorial in *Michigan Medicine* and was published in full in the promotional folder for the spring postgraduate program.

The House took no action on Resolution 43 re use of obstetrical departments of hospitals.

Resolution 44 re remuneration of hospital utilization committees was disapproved by the House.

The House adopted a substitute for Resolutions 1, 35 and 45 (see Item 1).

28. *Automobile Safety Design Research Committee.* Resolution 46 directed The Council to appoint such a committee to "solicit the management of the automotive industry in Michigan to furnish appropriate engineering talent to further research advanced safety features in car design."

The Council Chairman appointed an ad hoc committee to meet with medical directors in the automotive industry to explore possible approaches to the implementation of this resolution. Plans are now being developed for its implementation.

Resolution 47 re resident-intern training was disapproved by the House.

The House took no action on Resolution 48 re study of the need for general practitioners.

29. *Establishment of an American International Medical Service Office.* Resolution 49 recommended that AMA be requested to set up such an office and that state medical societies be requested to establish similar committees. The Committee on International Health transmitted this information and suggestion to the American Medical Association.

The MSMS Committee is continuing its efforts to coordinate with the AMA plans so that an effective nationwide network can be implemented.

30. *Committee to Evaluate and Set Up Preceptorship in Family Practice.* Resolution 50 directed The Council to appoint a committee to evaluate and set up a preceptorship in family practice, and to consider other methods for stimulating, interesting and training more young physicians in general and rural practice in Michigan.

The Council referred this resolution to the Education Liaison Committee. The Committee obtained detailed information from the several medical schools which have general practice preceptorships. The Committee also conferred with the AMA which has a national-level conference committee with the American Academy of General Practice studying ways to obtain or produce more GPs. The Education Liaison Committee is continuing its study with the deans and is awaiting helpful recommendations from the national committee.

Resolution 51, re commendation to MSMS staff for Centennial efforts, required no follow-through.

The House took no action on Resolution 52 opposing classification of a physician service as a hospital service.

31. *Inclusion of MDPAC Voluntary Contribution Request in MSMS Dues Billing.* Resolution 53 requested The Council, after favorable interpretation by legal and tax counsel, to approve and implement the inclusion of billing for the voluntary non-deductible contribution to the independent Michigan Doctors' Political Action Committee with the annual dues statement.

Legal Counsel Dodd reported to The Council that inclusion of a request for AMPAC-MDPAC contributions as an integral part of the MSMS dues notice might jeopardize the tax status of MSMS. The Council then authorized that the MSMS dues billing envelope contain a separate AMPAC-MDPAC Voluntary Solicitation and that any additional cost to MSMS be defrayed by MDPAC. Such a Voluntary Solicitation form was included in the 1966 dues billing.

32. *Sharing MSMS Economic Information with AMA.* Resolution 54 suggested that MSMS offer to AMA detailed economic records developed by MSMS for use by our leaders at this critical time.

This request and information has been presented personally to representatives of the American Medical Association.

Resolution 55 was withdrawn by the introducer.

Resolution 56, commending officers and staff for Centennial arrangements, required no follow-through.

THE REFERENCE COMMITTEE on Reports of Officers, Herbert W. Harris, MD, Chairman, complimented the Speaker on the brief and concise manner in which he reported the implementation of the 1965 House of Delegates actions. The Reference Committee further noted that 1965 Resolution 4 re limiting liability to encourage hiring of the handicapped is of current importance and implementation should be attempted again during the coming year.

THE HOUSE adopted the report of the Reference Committee.

5. Comments and Recommendations from the Judicial Commission — D. N. Sweeny, Jr., MD, Chairman

The 1965 House of Delegates adopted Article 11 of the Constitution creating a Judicial Commission of the Michigan State Medical Society. The Commission is composed of ten members elected by the voting members within seven Judicial Districts.

The establishment of a Judicial Commission places MSMS among state medical society leaders who have taken similar action to demonstrate the willingness of organized medicine to take effective action "in matters relating to professional ethics, grievances, mediation, discipline of members and professional conduct generally."

Since its formal organization in January, 1966, the MSMS Judicial Commission has met on a regular basis, moving with deliberate speed in developing its procedures and operational rules.

In June a brief guide to the operation of the Commission was distributed to component society officers, members of the House of Delegates and The Council of MSMS.

The powers and duties of the Commission are several:

The Commission will, upon such request as it may deem proper, interpret any ambiguous or doubtful provisions of the Constitution or Bylaws of the State Society or of a component county society as any such provision pertains to matters of ethics, mediation, grievance or discipline. In this connection it should be kept in mind that the constitution and bylaws of a component society must, at all times, be consistent with those of the State Society as amended (Sec. 1, Chapter 1, MSMS Bylaws) and that interpretations by the Commission will be rendered in the light of that requirement.

The Commission will, when it is deemed necessary or desirable, promulgate more specific regulations governing the submission of requests for interpretations.

Although the Commission has the authority to make ethical interpretations and decisions in accordance with the standards of the American Medical Association, the Commission believes that ethical questions should first be considered and, if possible, resolved at the county society level. Therefore, until experience dictates the necessity of different handling and requires the adoption of more specific rules and regulations, the Commission will observe the following procedures:

1. Any member's request for ethical interpretation or guidance should be submitted in the first instance to his county society.

2. If the county society fails to act or the member is not satisfied with the interpretation or opinion of the county society, the member may request the Commission to review the matter.

3. A component society may, at any time, request an ethical ruling or opinion from the Commission.

4. Upon receiving a request for review from a member or for ruling from a component society, the Commission will comply with such request if, in its judgment, the question submitted is of sufficient importance, is of sufficient interest to the profession, and within the scope of its powers and duties. All rulings and opinions of the Commission will be based upon and be consonant with the Principles of Medical Ethics of the American Medical Association.

The detailed rules of procedure governing appeals from county societies are to be found in Chapter 6 of the Bylaws and, until superseded or amended by rules and regulations of the Commission, will continue to govern.

The power of the Commission to exercise original jurisdiction is intended to fill a long-existing void in the machinery available for handling certain disciplinary problems, particularly in the smaller societies. Its primary purpose is to provide a way of handling disciplinary proceedings in those extraordinary cases in which, due to local conditions or unusual circumstances, disciplinary proceedings cannot otherwise be handled promptly or effectually. It is not intended that the Judicial Commission take over the disciplinary problems of a component society merely to relieve that society from unpleasant tasks, and the society or member who seeks to invoke the jurisdiction of the Judicial Commission will be expected to furnish sound reasons therefor.

This, obviously, is another area in which the Commission feels that it would be unwise to attempt to announce detailed rules and regulations governing procedures until it has accumulated sufficient experience to do so intelligently. Until more detailed procedures are announced, the Commission will consider each request upon its individual merits and, if it assumes jurisdiction, will announce the procedures that will be followed.

In addition, the Commission is given power to adopt rules and regulations governing all procedures pertaining to ethics, mediation and discipline, and, until such rules and regulations are adopted by the Commission, procedures in these areas will continue to be governed by the provisions of Chapters 6 and 7 of the Bylaws. When procedures are changed by new rules and regulations, ample notice will be given to all county societies and their members.

I might say parenthetically, Mr. Speaker, that the Commission has had many requests for interpretations of ethics. We have had many requests for rulings, most of which have been satisfied at this moment, but there are several matters before the Commission to be dealt with in the near future.

Thank you.

Speaker Lightbody stated this was an informal report of the Judicial Commission for information to the delegates and was not referred to a reference committee.

5. President's Address — Luther R. Leader, MD

I have no intention of reporting to you the details of my year as President. I intend only to make some generalizations regarding that experience as your President and offer some observations based upon it.

I can report to you that your Society is held in high regard by other state medical societies. In my visits to the annual sessions of neighboring state medical associations I repeatedly heard expressions of admiration for the work that we are doing in Michigan. It made me proud to be your representative.

I had the privilege during the course of this past year to visit many meetings of lay organizations. Some of these were of the political variety, others educational and social. Here again, I can report to you, the Michigan State Medical Society was always held in high regard. Although I visited many county medical societies, and in some of them found suggestions and some legitimate criticism, I found throughout this State a general feeling of high approval by the doctors of the work being done.

I think we can do better in one regard, and that is our liaison and participation in the policy-making councils of the American Medical Association. While it is true that we have had excellent participation by many of our members in the scientific activities of the AMA, it is still rankling to me that we do not have and have not had a member of the MSMS on the Board of Trustees of the AMA in the 20th Century. It bothers me that we have not had an officer of the American Medical Association from MSMS membership during the past quarter century. This is not to decry the wonderful work by the late William Hyland, MD (former Chairman of our AMA delegates). Quite the contrary. The work which he did in revising the administration of the AMA and the service he gave over the years entitled his State to a membership on the Board of Trustees or in the official family.

But that is not the basis upon which Trustees or officers are chosen, so I offer as a recommendation that we place increasing emphasis on the planning and participation of our Society in the work of the AMA House of Delegates and that every effort be made to obtain representation in the highest councils of the AMA.

There is another area which I feel strongly deserves an appraisal by this Society as we look down the road ahead. It isn't unusual these days to hear heated comments calling for radical action. Often these opinions are productive of more heat than light, and it isn't unusual for them to be based upon a vast fund of misinformation.

We should have learned by now that we cannot take at face value everything we hear about medical practice, any more than we can take at face value the wild statements made about medical science. Also, we should base our thinking upon the facts of today, recognize a minimum of "inevitabilities," and cease to base far-reaching decisions upon fears rising from sheer conjecture.

Of course there are those among us who decry any change. All of us tend to look askance at changes proposed from within or outside the profession because we are proud of the accomplishments made under our present systems and policies. Our tendency, therefore, is to wait until change is proposed from outside, and then to sit in judgment upon such change. This is a luxury, gentlemen, we can no longer afford. Indeed, it is not the procedure or mark of leadership.

Do you agree with me that change is inevitable? Will you accept that medical science will change in the future, perhaps even more rapidly than it has in the past? And will you accept that the society in which we live as doctors, as patients and as citizens, is changing at a surprising speed? If you do agree with these concepts, then you must accept the inevitability that the way we practice medicine is changing and will continue to change at a pace that will tax our individual understanding and our collective patience.

I have known that the way we practice medicine is important to us as doctors and as members of a great profession. We are all aware, of course, that the way we practice is important to our patients. But what we MUST accept is that the practice of medicine in all of its facets and as practiced by each of us is important to people and groups who are NOT our patients. Among these people ARE those who live in other states and nations and those who have responsibilities in the fields of business, government, education, and so on, that force them to take an active interest in the practice of medicine.

We cannot ignore these people, and I question whether we can successfully fight them. Certainly we do not want to accept their *dictum en toto*. What can we do?

Some of us would say to the Legislature and to Congress, "Pay no attention to health or medicine. Your medical profession will do what needs doing."

There are those who would say to the universities and to the great pharmaceutical industries, "Teach medicine as we direct you to. Do the research as we tell you to. Work in those hospitals we permit you to." And I have heard doctors tell newspaper, radio and television people, "Print this about medicine and health; don't print that. Dramatize this; don't dramatize that."

One of our favorite pastimes is to decry the work of the social workers, welfare people, and the like.

To be truly honest with ourselves, we do not expect to force any of these groups to do our bidding. We are in most instances giving vent, on the one hand, to our frustrations and, on the other, to an inner confidence that we are possessed of maximum knowledge that can be applied to the solution of health needs and that we deserve to be listened to. Personally, I think this confidence is well merited. But we know that there are many voices in today's society and that the voice which will predominate, at least in the near term, is not necessarily the voice of competence and truth.

What can we do?

I believe we of the Michigan State Medical Society have found the answer. I believe it has been demonstrated repeatedly and I personally have seen its success. I am taking this opportunity simply to re-emphasize the value of this particular portion of our Society's work so that in your deliberations you will give full support to such proposals that will advance this portion of our Society's effort even further and with even greater rapidity. The activity I refer to might be most simply categorized under the word "liaison." I should like to call it liaison before the fact rather than liaison after the fact. The former is leadership; the latter can border upon servitude. The former is freedom; the latter is, at best, acquiescence.

What I am saying is this: Medicine must lead or it must inevitably take the dictation of others. Now leadership in organizational life falls to those who call the meetings, who initiate plans, who conduct and report the research, who cite the need, who know the score.

We have been doing this. We have developed a liaison with other health associations by the organization and support of the Michigan Health Council, an organization which this year is celebrating its twenty-fifth birthday. In this organization we associate with 100 other state-wide associations, each of which has a major interest in health. Although we have consistently been the largest financial contributor, this organization has now reached a point where our contribution is a far lower per cent of its total budget, whereas the services rendered in our behalf have become far greater than heretofore.

Our leadership among the professions has been dramatically demonstrated in the organization of the Michigan Association of the Professions. This organization has not only captured the imagination of the professional people in Michigan but its progeny are to be seen in many other states. Its influence in this State during the past seven years and concomitantly in the nation as it extends its principles has grown remarkably. Financially, the MSMS has received more money in return than it has invested, and we are indebted to this organization for wide exposure of the progress of medicine on its outstanding television programs and at its highly successful Congresses of the Professions. Also, I want to commend the work of the many liaison committees which we have with such groups as pharmacy, nursing, law, medical schools, United Fund, and so on. Perhaps one of the most valuable in terms of immediate gains has been our Liaison Committee with the State Executive Office (that is to say, the Governor's office).

By way of the two organizations to which I have referred and these liaison committees, we have led the way in Michigan in planning for the health care of the total citizenry. Anything which I will now say should not be interpreted as in any way subtracting from the credit which is rightfully due these groups.

With that clearly understood, I suggest today that we must go further. We must develop greater liaison and we must do so at all cost and with all speed. We must develop greater liaison with the two political parties in Michigan. We have barely begun to scratch the surface of the importance that the MDPAC and AMPAC movements can be to us and the service we have to offer. We must establish liaison committees which will, in advance, develop and cause to be included in party platforms health-related subjects, and cause to be victorious on the county, state and national levels candidates who understand and listen to the voice of medicine.

Our liaison with educational institutions today is limited, although we meet regularly with the leaders of the medical colleges and occasionally with representatives of the directing boards of our great universities. We are not as close, however, as we should be to the leaders in the fields of economics, guidance, political science, nursing, public health, sociology and education. All of these and others are focusing their attention on health and are directing its future by their teachings. Even our ties with the great scientific world of research are not close enough. The great biochemists, geneticists, nuclear physicians, and so on, who reside within Michigan, are making contributions of great importance to us and we don't know them well enough. Nor do we know well enough the researchers who serve the great pharmaceutical and other health-related industries of Michigan.

This year we have made a start toward developing a liaison with governmental agencies at the agency level as differentiated from the legislative level. Unfortunately, this has been done somewhat perforce. I do not believe we are too late, but we have been slow in placing sufficient emphasis and a sufficient degree of participation in this very important area.

I could go on and on, but I think my point is made. It is this: We must bring into our councils, we must counsel, and we must join the councils of the great mass of lay persons who have and will continue to have a keen interest and influence on medical practice. To do otherwise is to abdicate our leadership, our professional service, and to fall into the role of the skilled technician who follows his master's bidding.

I guess that this will cost money. I know it will, because it will cost us time — and, to the doctor, time is money. We will pay this money one way or another, in time or out of pocket, dependent upon the decisions of this House of Delegates and The Council.

I have taken your time today, with all my strength, to emphasize this challenge. I would fail in my responsibilities to you if I did not do so.

I think you can see in the pride with which I have referred to this Society's successes that I hold you and your peers in the highest regard. Perhaps the best way I can express my appreciation to the staff of the Michigan State Medical Society for its work is to say that it has by its dedication and by its action proven to be worthy of this great profession in this great Society in this great State.

Thank you.

THE REFERENCE COMMITTEE on Reports of Officers, Herbert W. Harris, MD, Chairman, thanked and complimented the President on his year of service and for his analysis of the present situation of MSMS as he reported it in his remarks.

THE HOUSE adopted the report of the Reference Committee.

7. President-Elect's Address — C. Allen Payne, MD

Mr. Speaker, Members of the House of Delegates, Officers and Distinguished Guests:

It is with deep humility and sincere gratitude that I approach the duties of the high office of President of the Michigan State Medical Society, fully aware of the great accomplishments of my many outstanding predecessors. Throughout the years your Michigan State Medical Society has been a pioneering organization in improving clinical medical practice and providing better health care for all the people of Michigan. The continuation of this great tradition and the further improvement of health care in Michigan will require the total use of our collective intellectual and scientific resources throughout the next year, and particularly in the next decade because of the rapidity of both medical-sociological and medical-scientific changes. I pledge my complete and undivided cooperation to the end that Michigan will be a healthier State, and we will be proud of our accomplishments.

My activities as President-Elect have afforded opportunities to visit with leaders in organized medicine throughout the United States. Such meetings have pointed up problem areas wherein organized medicine must be an important contributor if satisfactory solutions are to be reached. These problems are, in fact, challenges to organized medicine both in Michigan and throughout the nation. Today, I would like to mention some of the more important challenges in the hope that action by you gentlemen as a House of Delegates will help to initiate satisfactory solutions to these problems.

1. The shortage of medical manpower (both physician and auxiliary personnel) grows day by day. It can become critical. The Michigan State Medical Society has been working in this field for many years; but despite its efforts, the seriousness of the imminent shortage demands that we redouble our efforts with bold and new approaches. We must, in cooperation with educators and other interested parties, not only provide sufficient manpower to maintain today's percentage ratio of medical manpower to population, but improve upon that ratio.

2. The problem of improved and more effective continuing education for physicians is always with us and becomes of even more paramount importance in view of the increasing patient load of the average practicing physician and the burgeoning body of knowledge he must use. I believe we must restudy and, if necessary, redesign and streamline our programs for postgraduate continuing medical education so that they will be more effective by being more easily available and more efficiently presented. The personal presence of the teacher is most desirable, but this may be a luxury that will have to give way to use of other communications media.

3. The past several years have seen a tremendous increase in health legislation at both the national and state level.

The complete implementation of the Medicare and the Heart, Cancer and Stroke legislation will be a major factor in changing present patterns of medical practice. Present indications are that they will tend to produce a decrease in the quality of medical care. In all probability, governmental control will escalate. Already Congress and the Executive Office of the federal government are very seriously considering modifications and very expansive extensions of this type of legislation.

Our State Legislature has also shown marked interest in health legislation, and has presented us with a number of important problems during its past session. Many of these proposals will again be introduced next year. Amalgamation with osteopathy and rewriting or updating the Medical Practice Act are two items which I feel sure will be demanding more of our attention in the next several years.

In order to successfully combat state and national legislation which would degrade the quality of medical care, and in order to further improve medical care through legislative means, we must form a more effective, knowledgeable team to include the individual physician, his county medical society, the Michigan State Medical Society and the American Medical Association. It is only by each of us exerting every reasonable effort at adequate communication with our respective legislators, congressmen and governmental leaders, preferably at the local level, that we can hope to get medicine's points of view across.

4. We need to re-examine the patterns of medical organizations at the national, state and local levels, to the end that they can be strengthened and thus prepared to handle the tough challenges that confront us now and in the future. We must develop more meaningful understandings and relationships between the medical organizations and the individual physician, and vice versa. We must develop better representation and cooperation among all branches of medical practice so that the Michigan State Medical Society can always speak and act for medicine as a unit.

5. Modern medical care is valuable, but it can be costly. This is to be expected as a result of the great technological advances, expensive equipment, the employment of more skilled and highly trained personnel, the costs of developing more effective drugs and the increased operational expenses of hospitals and other facilities. The individual physician and organized medicine have an obligation to avoid waste of financial resources by always behaving in the prudent economic interest of the patient, commensurate with quality care. *Medicine is not practiced in an economic vacuum.*

6. Improved communication between organized medicine, individual physicians and the public is also badly needed. The demand for health information is insatiable. It is our duty to translate sound information into newsworthy articles, speeches and press conferences that can compete successfully for public attention with the more sensational but less authentic stories that sometimes command wide attention. Such improved communications can also be an important factor in deciding the present great debate regarding the wisest use of public funds in medical education, research and patient care.

7. A most critical area of communication is between the physician and his patient. This is the area where the "image" of medicine is enhanced or destroyed. Evidence is accumulating that the individual physician may not be satisfying the wants (be they real or imaginary) of many of his patients. It is the responsibility of the Michigan State Medical Society to encourage and assist physicians in assuming even greater obligations to communicate effectively with all patients, to the end that each is at least reasonably well satisfied.

8. There is considerable need for clarification of our professional ethics and their legal limitations. Recently questions have come to the fore concerning the relationship of certain provisions of the Sherman Act, ethical and moral principles and certain actions of organized medicine. A continuing vigilance of happenings in this field will be necessary before a review and clarification of medical ethics can be considered.

These eight points are what I consider top-priority challenges facing medicine today. There are many more of which you are aware. You will notice that none of them are small problems easy of solution in a year or two. Rather, they are major challenges that have come about as the result of sociological and political trends and events of the past decade. Sustained activity for at least a decade will be required to effect their solution.

Change is inevitable. If the physicians of Michigan and the Michigan State Medical Society are to maintain and extend their leadership in the health field, every one of us must become more intimately involved in helping to mold the opportunities which change provides to the benefit of our patients and our profession.

Your presence at this meeting as representatives of the physicians of Michigan is testimony that you are willing to accept the responsibility for meeting the challenges I presented and many other problems confronting organized medicine. I am confident that your deliberations today and tomorrow as a House of Delegates, and the policies that you will establish, will be of paramount importance in continuing the traditions of our profession and the Michigan State Medical Society, to the end that the best possible health care will be available for all of the people of Michigan.

I pledge my complete cooperation, support and assistance to you, the officers and the members of The Council of the Michigan State Medical Society, in carrying out the policies and projects developed as the result of your deliberations here.

Thank you.

THE REFERENCE COMMITTEE on Reports of Officers, Herbert W. Harris, MD, Chairman, noted the eight categories of important challenges to medicine. The Reference Committee believed he had outlined a concise resume of current problems, stating: "We commend his remarks not only to the members of the House of Delegates but to all members of MSMS for their study. We look forward to his leadership in the problems he has enumerated, and we trust he will be able to maintain the esprit de corps into the second century of medical service in Michigan which has sustained medicine in the past."

THE HOUSE adopted the report of the Reference Committee.

8. Remarks from American Medical Association — Mr. Leo Brown, Assistant to the Executive Vice President of the AMA

Mr. Speaker, Mr. President, Members of the House of Delegates, Ladies and Gentlemen:

I bring you greetings from the American Medical Association on the occasion of your One Hundred First Annual Meeting. In behalf of Dr. Blasingame I extend to you his best wishes for a successful meeting. Dr. Blasingame had another engagement and is unable to attend this meeting.

It certainly is a distinct honor for me to have the opportunity and privilege of addressing this House of Delegates. I want to congratulate you first on the quality and clarity of the resolutions that have been presented. It made me feel very much at home, because we ordinarily get in about half of the resolutions beforehand so we can print them in the book, and the other half come in and are introduced at the time of the meeting. You had twenty-eight in my book, and you ended up with fifty-six. We usually have around fifty, and at the last annual meeting of the House of Delegates of the American Medical Association we ended up with 108. So, you can understand the amount of work we have there.

I want to congratulate you, too, on the young men from the two universities you have here. I recall it was just sixteen years ago that I had the privilege of holding the first Constitutional Convention of the Student American Medical Association. Two of the young men mentioned the conference they had attended – that is, the conference of their chapter presidents in Chicago a few weeks before. Next June this conference will be held in conjunction with the American Medical Association annual meeting in Atlantic City. And so we are constantly making an effort to work as closely as possible with the Student American Medical Association.

In terms of your medical assistants organization, I have had the opportunity of meeting with it on several occasions while attending your meetings. It so happens (and I am rather proud of it) I am an honorary member of the American Association of Medical Assistants.

For two years I have had the privilege of attending your Council meetings at Mackinac Island. There I have had the opportunity to get to know the dedicated and talented physicians you have elected to run your Society and to serve it. It has also given me the opportunity to learn of the magnitude of the various programs that the Michigan State Medical Society is promoting.

The leadership that Michigan has shared with the American Medical Association, I can assure you, has given breadth of experience and a depth of understanding to many of the complicated problems that face the American Medical Association. I can assure you that the Michigan delegation has been in the forefront of many issues confronting the American Medical Association House of Delegates. You have a number of articulate individuals who do not hesitate to express the opinions of this House of Delegates before the American Medical Association.

I would like to pay tribute to Dr. William Hyland, who was a very close personal friend of mine. I had the opportunity of working with him on several special committees of the AMA and as Chairman of your delegation, and I know we shall all miss him a great deal.

The others of your leaders – Drs. Leader, Payne, Hiscock, McGillicuddy, Lightbody, Coury, Sweeny, Masters, Pedden, Rodda, Mason, Hayes, Saltonstall and Slagle, the Chairman of our Council on Medical Service – all of these gentlemen have great potential in terms of leadership within the American Medical Association, as your President discussed this morning.

But I came here not to bury Caesar nor to praise your leadership; rather, I came in behalf of the American Medical Association to thank you for the cooperation that the AMA has received from the leaders of Michigan medicine, and to review for you only briefly a few of the things that have taken place since the annual meeting of the American Medical Association in June.

The actions of the House of Delegates of the American Medical Association, I think, were substantial, as printed in your Delegates' Handbook. Of particular significance was the policy statement relative to direct billing, both under Title XVIII and Title XIX of Public Law 89-97.

Also, requesting our state medical associations to report as promptly as possible any attempts by government to supervise or control the practice of medicine in their respective states as the operation of Title A and Title B were to go into effect; also, to encourage or to develop a more realistic understanding of the professional relationship within the hospital staff and to encourage physicians to assume their rightful responsibility of leadership within that staff.

Since June many conferences have been held with government leaders particularly regarding the regulations revolving around Title A and Title B. We have been in constant touch with Wilbur Mills and the House Ways and Means Committee and other members, encouraging them to place some limitation on the income of those families who would be eligible for hospital and medical services under Title XIX. Other restrictions to curtail that program have also been recommended to this particular Committee.

Although we have not sponsored any specific legislation up to the end of this particular Congress, our Council on Legislative Activities has been active in this particular field and is now prepared, as reported to the Board of Trustees last week, to:

Ask for amendments to Title XIX which would permit the direct payment to physicians as adopted by the House of Delegates of the American Medical Association.

Require free choice of physician.

Ask for reimbursement on the basis of usual and customary fees.

Encourage the use of insurance carriers to implement the program.

Provide that federal contributions shall not be affected by the identity of the state agency; whether or not it is the welfare department or the department of health, there would be no difference in the federal payments.

Permit state plans to vary within any one respective state so that Title XIX may be different in a portion of Michigan than it would be for the entire state.

Also, provide an advisory council to oversee the operation of Title XIX.

There are some other major legislative activities that the American Medical Association has been engaged in over the past two months:

We have supported the commissioning of male nurses in the Regular Army and Air Force.

We have supported the water-pollution legislation before Congress.

We will oppose and have opposed S-2568, the Medical Restraint of Trade Act.

We have expressed the American Medical Association's views on H.R. 15119, the Unemployment Insurance Amendments of 1966.

We have supported the Military Medical Act of 1966 and also highway and auto safety legislation.

Last week Dr. Fred Swartz of Lansing, Michigan, testified before the Subcommittee on Health of the Elderly, which is a special Committee on Aging, of the United States Senate, on the subject of "Prevention and Detection of Chronic Conditions." Dr. Swartz spoke on behalf of the American Medical Association Committee on Aging, and reports we received from Washington are that his testimony was exceptionally well received. We are grateful for the talent Dr. Swartz is sharing with the AMA and its Committee.

Although I have spent some time reporting on legislative activities, I want you to know that this is not all that is going on at the American Medical Association. As a matter of fact, we have been extremely active in a great many other areas.

I know that this House of Delegates has long been interested in the area of osteopathy. The American Medical Association House of Delegates had appointed a Committee on Osteopathy, which has since been disbanded simply because it was restricted in the scope of its activities. A new committee has been appointed through three members of the AMA Board of Trustees, meeting for the first time last Thursday, to discuss this over-all problem. I can assure you that every effort is going to be made to see that Michigan representation appears before this particular committee so that it will know the problems that you are confronted with relative to osteopathy in Michigan.

The Board of Trustees recently appointed a new Committee on Physician-Hospital Relations, realizing that more and more problems will have to be resolved concerning the implementation of Title XVIII and Title XIX and the regulations revolving around them. Therefore, this particular Committee will confine itself specifically to hospital-physician relationships.

A Committee on Medical Manpower is currently in operation in an effort to determine the extent or the need of physicians and allied medical personnel in our nation.

A recent report of the Citizens' Commission on Graduate Medical Education was released just last week. I think it follows along some of the comments Dr. Leader made in terms of trying to involve a number of other outside organizations and individuals in the activities of medicine. May I list for you several of the individuals who were also members of this Commission, eight of whom were laymen: Dr. Francis Boyer, President of Smith, Kline and French; Everett Hughes, PhD, Professor of Sociology at Brandeis University; Edward H. Levi, of the University of Chicago, Provost of the University; Charles E. Odegaard, President of the University of Washington; Joseph T. Wearn, MD, Professor and Dean Emeritus of Western Reserve University School of Medicine; The Hon. Charles E. Whittaker, of Kansas City, Missouri, former Justice of the United States Supreme Court; Dael Wolfle, PhD, Executive Officer of the American Association for the Advancement of Science and George B. Young, PhD, President of Field Enterprises of Chicago. The Commission is headed up by John Millis, President of Western Reserve.

There are two major points made in this extensive study on graduate education. I want to read just two brief paragraphs:

"The Commission therefore recommends that graduation from medical school be recognized as the end of general medical education and that specialized training begin with the start of graduate medical education.

"Abolishing the internship as a separate and freestanding year of training, and incorporating that year into a progressively planned residency, will open the way to a greater amount of flexibility and coordination in the planning of residence programs."

So, this is the recommendation coming from this special Commission that was appointed by the American Medical Association to study graduate medical education.

I had the opportunity last week of attending an Interspecialty Committee meeting. The Board of Trustees asked fifteen medical specialty societies to nominate three individuals, from whom the Board would select one, to form a Medical Specialty Committee. There are fifteen members on this particular Committee representing the major medical specialties. Others will be appointed to this particular Committee. It is extremely interesting to note the problems that specialty societies are encountering today that heretofore they were not involved in. And so we have this medium of communication through the American Medical Association Board of Trustees and the American Medical Association House of Delegates, to hear and listen and accept the recommendations coming from our specialty societies.

The American Medical Association, of course, as reported by Dr. Leader, has a great many liaison activities. Our liaison with the American Hospital Association has been almost constant in recent weeks or since the AMA annual meeting; also, with the Pharmaceutical Manufacturers Association as it would relate to the use of generic terms, and the responsibilities that have been assumed by the National Research Council in testing the efficacy of some 2,000 drugs that were currently marketed before 1948.

We have been in constant touch also with other allied medical professions. A new department within the AMA has been established relating to allied medical professions and how we can cooperate with them. Much effort is being exerted now in relationship with junior medical colleges for the establishment of many medical technology schools within their walls.

In the international health field we have been extremely active. I must say we are appreciative of the number of Michigan physicians who have volunteered to serve in Vietnam, aiding the civilian population. As a matter of fact, Congressman Harris has introduced a resolution whereby all physicians who have served on a volunteer basis in Vietnam or in South Vietnam, serving the civilian population, should be awarded a Presidential citation.

Also, our program to support the medical faculty of medicine at the University of Saigon is going forward.

Our liaison with the National Medical Association has been productive in recent months. We maintain this liaison through our committee of the Board of Trustees and the Board of Trustees of the National Medical Association in trying to resolve the problems resulting in the area of discrimination.

There are numerous staff task forces in operation – medical care, medical manpower, county medical societies – and I am interested to see that you have a committee in Michigan that is studying the possibility of amalgamating or drawing together numbers of county medical societies into one, which would give them sufficient funds, and in order to employ adequate personnel to operate effectively within these areas.

We discussed the other day the establishment of a National Twin Registry for epidemiological studies, which we hope to discuss further and perhaps recommend to the American Medical Association.

In the area of student loans, it was interesting to me to note that the AMA over the past four years has guaranteed loans to 30,000 medical students in the amount of $42 million. This certainly is a positive effort in terms of the activities of the American Medical Association and medicine generally, supported by the monies that you have provided.

In closing, I would be derelict if I did not pay tribute to the staff that you have at the Michigan State Medical Society. You have one of the finest executive staffs that there are in the United States serving state medical associations. Your staff is doing a magnificent job. It has developed an especially and exceptionally fine liaison with the American Medical Association, and it isn't at all unusual to get a phone call from any one of them for the services we are able to assist with. We are most appreciative, too, of the excellent cooperation that we have received in the promotion of AMA programs within Michigan.

The American Medical Association has many problems facing it today – probably more than at any other time in the history of the Association. Nevertheless, I am sure that with the leadership such as you have in this room and such as we have in the AMA House of Delegates, medicine will be able to progress and overcome these problems, and to make a significant contribution to the American people and to the American medical profession.

9. Report of the Woman's Auxiliary to MSMS — Mrs. Rufus H. Reitzel, President

I am sure this has been the shortest year of my life, for it seems that only yesterday I returned from the National Convention in New York and shortly thereafter from the National Conference in Chicago. With inspiration and enthusiasm engendered from these meetings, many plans were formulated whereby our Michigan Auxiliary might have a productive and satisfactory year. I believe we have achieved a goodly measure of success.

Unless the doctors' wives are informed and well fortified with knowledge concerning what is happening in the health fields today, they will not be very effective in trying to develop and mould opinions in their community. Thus, our theme has been "Be Informed." To this end, the whole State Board has exerted its efforts. Each State Chairman has been diligent in supplying information in her field to the County Auxiliaries by furnishing pamphlets, visiting and speaking with members, showing films and helping to organize meetings for the benefit of the public.

Membership now totals 3,480 with 62 members-at-large. We have 43 organized and 13 unorganized counties, and have six counties with 100% membership. Our progress in this field could be stepped up and needs the exerted effort of every doctor's wife.

In *Health Careers* our state has done outstanding work. Jackson County's Health Careers Committee prepared a book which was distributed to all high schools and junior high schools in their county. This book listed the names of fields allied to medicine, the colleges and hospitals where training might be obtained, and the cost and years required to complete the courses. This book was so well accepted and brought such gratifying results in Jackson County that soon there were requests for it from all over the state. Through the efforts of Mrs. Edward Lake, State Chairman of Health Careers, and a physician from her County Medical Society, the State Medical Society and Michigan Health Council have united in an effort to make this material available to all senior and junior high schools in the state. The American Medical Association was contacted concerning the efforts of Michigan to recruit young people in health careers, and as a result, they have just published a book entitled "Horizons Unlimited" which is a handbook describing rewarding career opportunities in medicine and the allied fields. In the middle of this book is an insert of four yellow pages giving the opportunities for education and training in the health fields in Michigan.

Under the leadership of Mrs. Robert Fraser, Calhoun County has organized a Health Careers Council from which results will be forthcoming in the near future.

AMA-ERF has had another successful year raising $18,668.69. It is encouraging to note that increasing interest is being shown in the loan fund as more students become aware of its availability.

International Health Activities collected and sent to World Medical Relief two and one half tons of drug samples as well as many other supplies and much equipment.

Community Service is an area in which we have been active in many fields of endeavor, supplying material, films and information wherever needed. Not the least of our efforts has been expended in helping the State Medical Society make a success of the HEALTHMOBILE project. Our auxiliaries have staffed the HEALTHMOBILE in every county in which it has appeared as well as organized the groups who were to go through and observe its exhibits. It was stated to me that without the assistance of the County Auxiliaries this HEALTHMOBILE project could never have been the success that it has.

Mental Health was aided greatly by Calhoun County which did an outstanding job in this field in November. The county sponsored an informative meeting with an outstanding panel and excellent resource people which resulted in bi-county cooperation and a realistic plan for community health services. There were over 300 in attendance at this meeting.

Legislation, MD-PAC, Rural Health and T.B. and Respiratory Disease Speaking Project. There has been activity in all these areas according to the need. The chairman of each has been diligent and good results have been recorded.

AUXILIUM. Mrs. F. Mansel Dunn has done an excellent job as Editor of our publication. There have been four issues this year, all informative, well presented, and good reading.

The honor of being chosen to lead the Auxiliary this past year has been accepted with humility. I have tried wholeheartedly to fulfill its obligations and promote its progress. My fondest wish now is that the Auxiliary and the Michigan State Medical Society could be a little closer in their association and endeavors. I am sure that there are many members of the House of Delegates who do not even know who the Auxiliary officers are, and little about their aims and accomplishments.

The potential of our 3,480 members is great, for the women are intelligent and dedicated. I trust the Michigan State Medical Society will not hesitate to avail themselves of our time and talents on any and all occasions where we might be of service to them and the people of Michigan in promoting better health.

THE REFERENCE COMMITTEE on Reports of Officers, Herbert W. Harris, MD, Chairman, stated, "We are again impressed by the many activities of our Auxiliary. To mention only one or two, we would like to congratulate them on their collection of drugs for World Medical Relief and their community service, particularly in relation to the Healthmobile. We would also like to congratulate them on their continued interest in AMA-ERF which continues to enable students of medicine to complete their work."

THE HOUSE adopted the report of the Reference Committee.

10. Report of the Michigan State Medical Assistants Society — Mrs. Juanita Ferman, President

The Ninth Annual Convention of the American Association of Medical Assistants was held in New York City, New York, in October, 1965. Michigan was represented by four delegates and two alternates. Also in attendance were Dr. Glenn E. Millard, Chairman of our Advisory Board, Mrs. Millard, and Miss Helen Schick, Educational Coordinator for Michigan Blue Shield and Honorary member of our Society.

In November the annual County Officers and Committee Chairmen Conference was held in Kalamazoo with an attendance of 112. The theme for this program was "Opportunities-Responsibilities." The morning was devoted to a panel discussion of leadership skills with the members taking a very active part. Mrs. Betty Lou Willey served as panel moderator. The afternoon program was opened by the Honorable Raymond L. Hightower, Mayor of Kalamazoo. After his welcome and a brief talk, he introduced our speaker, Mr. Glenn S. Allen, Controller, State of Michigan, who spoke to us about local, state and national government management. Following Mr. Allen's address we were treated to a showing of a color film which had never before been shown to the public. This was on Major Edward White's historic "Walk in Space." This was provided by Kalamazoo Radio-TV Station WKZO and shown by their newscaster, Mr. Hugh Harper. Attending this meeting, besides several guests, were Dr. Glenn E. Millard, Chairman of the Advisory Committee, and Mrs. Millard. Miss Helen Schick, Educational Coordinator for Michigan Blue Shield, also attended.

The President represented MSMAS at the Michigan Health Council annual meeting.

Michigan State Medical Society's Officers Conference, held in Detroit, was attended by five representatives of MSMAS.

The Ninth Annual Educational Seminar was held on April 24, 1966, in Bay City with 165 members in attendance. Mayor Monte Wray, Mayor of Bay City, officially welcomed the group and proclaimed the day, "Medical Assistants Day," and presented the President with this Proclamation. The theme — "New Techniques of Our Era." Speakers were Robert M. Heavenrich, MD — "Immunization," John L. Shek, MD — "New Techniques in Thoracic Surgery." The L. Fernald Foster Lecture was given by Z. E. Taheri, MD, on the subject "Spinal Surgery and

New Techniques in Spinal Fusions." Honored guests present for this occasion included Dr. and Mrs. Glenn Millard, F. C. Cretsinger, MD, W. T. Davison, MD and T. J. Trapasso, MD, all members of the MSMAS Advisory Board. Also present were: Howard T. Knobloch, MD, President of the Bay-Arenac-Iosco County Medical Society, Robert Prophater, MD, Chairman of the Bay County Advisory Board, Gaylor Treadway, MD, and Lazalo Kovacsi, MD, members of the Bay County Advisory Board, Mrs. W. G. Gamble, Jr., First Vice-President of the MSMS Woman's Auxiliary, Miss Helen Schick, and Mrs. Marjorie Karker, staff member of MSMS.

The MDPAC Workshop held in Detroit in June was attended by Mrs. Nelda Gasperson, Vice-President of MSMAS.

Sixty-nine members, non-members and guests, including T. J. Trapasso, MD, Mrs. Trapasso and Mrs. Karker, attended the third consecutive Upper Peninsula Seminar in Sault Ste. Marie on July 16-17. Kenneth Shouldice, Ph.D., Director, Michigan Technological University, was one of the speakers. He emphasized the importance of education and stressed that medical assistants throughout Michigan that do not have formal education should do what they can through self-study. Miss Helen Schick spoke about Medicare and explained the importance of completing forms properly. Raymond F. Clevenger, Congressman from the 11th District, spoke of "Government and Medicine." Morse Turney, Psychologist, Newberry State Hospital, outlined the work of a psychologist in helping mentally afflicted people. Lt. Colonel Samuel Gabby, Medical Commander of Kincheloe Air Force Hospital, took us on a guided tour of Kincheloe Hospital facilities via colored slides.

The Seventeenth Annual Convention will be held this week at the Mr. President Motor Inn, and the Michigan State Medical Assistants Society will open with the third session of the House of Delegates. There will be 90 delegates representing 23 counties. Speakers for the convention are: Mrs. George Romney, Michigan's First Lady, who will speak on the topic of "Citizen Responsibility in an Election Year." Banquet speaker will be Homer H. Stryker, MD, whose topic is "Doctor in Business and Medicine." A panel discussion on "The Phases of Medicare," will be moderated by Mrs. Betty Lou Willey. Forming the panel will be Miss Ruth Morricey, Acting Assistant-Regional Representative for Health Insurance, Chicago, Miss Helen Schick and Miss Monica LaSarge, Administrative Assistant to the Medical Director of the Department of Social Welfare. The Thursday luncheon will be the installation of officers. The speaker will be Mrs. Leota Westfall of the Michigan Traffic Safety Center, Michigan State University; subject — "Safety Education for You and The People You Serve."

We will again honor a medical assistant of the year, present the membership trophy and county bulletins awards.

Total membership as of June 30, 1966: 875.

At the present time a new society, Downriver of Wayne County, is being organized.

Four issues of the Bulletin were sent to our membership, AAMA officers, Executive office, Trustees, Advisory Committee, State Presidents, State Advisory Committee and Honorary members.

Included in the delegates' packets are reports of all officers, committee chairmen, annual reports of the county presidents, agenda, and convention rules. These packets were mailed to all delegates prior to the convention.

The educational programs continue in several areas for in-service training. Several junior colleges are now teaching this program. A questionnaire has been mailed to all component societies to help revise the syllabus so that it will be geared more closely to the certification program.

The certification examination was offered for the second time in Michigan by Highland Park Junior College on June 25, 1966. Ferris State College and Highland Park Junior College will be utilized for the examination in 1967, if needed.

We have actively participated in the fight to preserve the practice of medicine. Many letters, personal contacts, telegrams and telephone calls have been made by our members on particular bills which affect the medical profession. Senate Bill 272, the Osteopathic College Authority Bill, and Senate Bill 962, the Nurse Practice Act, were two in which there was much activity by our members.

Mrs. Betty Lou Willey, Port Huron, was elected Vice-Speaker of the AAMA House of Delegates in 1965, and is a candidate for Speaker of the House this year.

MSMAS Bulletin was given third place Publication Award by AAMA and the St. Clair County Bulletin was presented second place Publication Award.

"Keep in Step With MSMAS," a membership brochure, has been distributed throughout the state at all Blue Shield Seminars and in the Healthmobile.

Constitution and Bylaws were mimeographed and sent to each member and the Advisory Committee.

Television appearances included: Channel 3, WKZO "Accent," November 4, 1965; Channel 6, WJIM "Formula," June 7, 1966; Channel 10, WILX "Your Public Library," January 6, 1966 and Channel 13, WZZM "Shirley Clark Show," September 27, 1966.

The members of MSMAS appreciate the continued interest and assistance in our work, given by MSMS. Our organization will continue to cooperate to the best of our ability for good medical care for the citizens of Michigan.

We appreciate the fact that every issue of MICHIGAN MEDICINE contained an item pertaining to our activities.

We thank you for the use of the facilities for our board meetings and we especially thank Doctors Glenn Millard, F. C. Cretsinger, W. T. Davison and T. J. Trapasso for their advice, cooperation and faithful attendance at all of our meetings. Their continued counsel and guidance has been most helpful.

Mrs. Marjorie Karker has been the liaison representative of MSMS, and this has been very helpful. She has attended all of our board meetings, making valuable suggestions and thus making it easier for each of us to do our job. We hope this relationship will continue.

We welcome your attendance at any or all of our meetings at the Mr. President Motor Inn, on Wednesday and Thursday of this week.

THE REFERENCE COMMITTEE on Reports of Officers, Herbert W. Harris, MD, Chairman, reported, "We are impressed by the many activities of our assistants and at the many opportunities offered for their instruction and training.

"We are particularly impressed by the educational opportunities now being offered in the junior colleges throughout the State.

"We not the membership of this Society totals 875. We urge the members of the House of Delegates and all other physicians in the State to encourage their assistants to join this organization.

"We believe they will become more valuable helpers, not only in their work in our offices but also in carrying out the principles and hopes of good medicine.

"We wish to congratulate Mrs. Betty Lou Willey of Port Huron for her election as Vice Speaker of the AAMA House of Delegates in 1965, and wish her well as a candidate for Speaker this year.

"We also wish to thank Mrs. Marjorie Karker for her work as liaison representative between MSMS and the Board of the Medical Assistants Society.

"Finally, we wish to thank Dr. and Mrs. Glenn Millard for their work as advisers to this group."

THE HOUSE adopted the report of the Reference Committee.

11. Report of Michigan Delegation to the AMA — George W. Slagle, MD, Chairman

(Doctor Slagle was unavoidably absent and his printed remarks were introduced by Luther R. Leader, MD.)

With deep sorrow the Delegation reports to the House of Delegates the death in July of William A. Hyland, MD, Chairman of the Michigan Delegation. His loss will long be felt and his leadership and influence sorely missed.

In June, the delegation elected George W. Slagle, MD, as Chairman Pro Tem. Doctor Hyland, because of his illness, was not able to attend the AMA meeting.

MSMS, through The Council, officially advanced Doctor Slagle as a candidate for the AMA Board of Trustees. The MSMS delegation conducted a vigorous campaign at the Chicago convention. An impressive brochure and personal letters were mailed to all AMA Delegates. The nominating speech was effectively delivered by Donald N. Sweeny, Jr., MD. However, geographical considerations influenced the voting and of the four candidates for the seat being sought by Doctor Slagle, Oregon's Max Parrott was elected.

Subsequently, however, Doctor Slagle was elected to the important post of Chairman of the AMA Council on Medical Service.

Following are some of the highlights of the 1966 AMA House of Delegates meeting:

Federal health legislation, physicians' billing procedures, medical ethics, racial discrimination, health manpower and an increase in AMA annual dues were among the major subjects acted upon by the House of Delegates at the American Medical Association's 115th Annual Convention held June 26-30 in Chicago.

Dr. Milford O. Rouse of Dallas, Texas, Speaker of the House of Delegates for the past three years, was named AMA President-Elect by acclamation. He will succeed Dr. Charles L. Hudson of Cleveland, Ohio, who took office at the Tuesday afternoon inaugural ceremony during the Chicago convention.

The 1966 AMA Distinguished Service Award was voted to Dr. Warren H. Cole of Chicago, head of the Department of Surgery at the University of Illinois College of Medicine, for his work in cancer research and his many contributions to medical literature.

Final registration reached a total of 35,506, made up of 12,445 physicians and 23,061 guests.

Federal Health Legislation

The House of Delegates received and considered a large number of reports and resolutions dealing with Medicare, the expanded Kerr-Mills program under Title XIX of Public Law 89-97 and other federal laws or programs.

The House strongly supported the general concept of individual responsibility and endorsed a report from the Council on Medical Service which included the following statement:

"Since the Council believes that the current interest in the doctrine of individual responsibility stems in large part from concern over the matter of assignments under PL 89-97, it hastens to add that, as a matter of American Medical Association policy, the Council on Medical Service recommends reaffirmation of the responsibility of individual physicians for determining how they will govern their professional practices under this law and that physicians should be made acutely aware of the manifest superiorities of direct billing as previously communicated to this House in the Council's Report E (A-66) on 'Recommendations on the Physician's Role in Medicare.'"

The latter report (Report E) was highly commended, and the House recommended its widest possible dissemination, including publication in its entirety in a prominent place in the earliest possible issue of *AMA News*.

Physicians' Billing Procedures

In connection with the Medicare part of Public Law 89-97, the House also adopted three resolutions which recommended that physicians use the direct billing method rather than the assignment procedure. At the same time, the House pointed out that adoption of these resolutions should not be interpreted as contravening the statement approved at the Special Session in October, 1965, which said:

"The American Medical Association opposes any program of dictation, interference or coercion, whether direct or indirect, affecting the freedom of choice of the physician to determine for himself the extent and manner of participation or financial arrangement under which he shall provide medical care to patients under Public Law 89-97."

In considering a resolution on the right to bill patients under Title XIX of the law, the House passed an amendment pointing out that direct billing has been recommended as the billing method of choice under Title XVIII by the Board of Trustees and the Council on Medical Service. It then said that since there is a wide latitude available to the states in establishing administrative procedures under Title XIX, each state medical association should work early and diligently in its own state so that any plan or law adopted in its state for approval under Title XIX would include authorization for direct billing.

The House also instructed the AMA Advisory Committee to the Department of Health, Education and Welfare to do all in its power to implement the intent of the resolution at the national level. In addition, the House urged positive steps to obtain statutory authority for a continuing medical advisory committee under Title XIX, and it called on the AMA and the state societies to maintain added vigilance to eliminate any patterns which might subvert the intent of Title XIX.

Hospital-Based Physicians

The House passed two resolutions involving billing and reimbursement principles affecting hospital-based specialists but also of significance to all physicians. The first said:

"The Principles of Medical Ethics declare that a physician shall not dispose of his services to a third party or 'lay' organization, and

"Title XVIII of Public Law 89-97 recognizes the principle of the separation of professional and hospital costs for services rendered by hospital-based physicians; and

"This principle has been advocated by the AMA, the American College of Radiology, the American College of Pathologists, and many regional organizations, and

"A great number of hospital-based physicians throughout the nation have declared their intention to bill separately for their professional services in keeping with this principle; therefore be it

"Resolved, That, since separate billing by the physician for his professional services is a preferred ethical practice, it shall be deemed unethical for a physician to displace a hospital-based physician who is attempting to practice separate billing when said displacement is primarily designed to circumvent separate billing." "Subsequent to this, the Board of Trustees on the advice of Legal Counsel refused to implement this; a letter of explanation was sent to all Delegates and Alternates and the constituent societies were asked not to implement this."

The second resolution regretted that publication of Medicare Regulations #5 was delayed until June 28, three days before the effective date of Medicare, and said that these regulations do not conform to the intent of Congress as expressed in Section 1801 of the Medicare law. It then declared that:

"The House of Delegates instruct the Board of Trustees and the Executive Vice President to request from the Social Security Administration an extension of date of final adoption of the proposed regulations of not less than 90 days, in order that the American Medical Association and all other interested medical organizations be allowed reasonable time to study and to submit to the Social Security Administration data, views or arguments and pertinent constructive comments and suggestions.

"To preserve the professional independence of medical practice that the Board of Trustees and Officers of the AMA be instructed to immediately inform the membership that Medicare Reg. #5 will not apply to physicians (whether hospital based or not) who

"1. have no financial relationship with a hospital covering medical services to patients,

"2. do not accept assignments but bill directly."

Medical Ethics

In acting upon a Board of Trustees recommendation that a physician may participate in the ownership of a pharmacy or regularly dispense drugs, remedies or appliances or provide eyeglasses to his patients *only when approved by his component and constituent medical associations and when it is determined by them to be necessary in the best interests of the patient,* the House approved the following reference committee statement:

"The Principles of Medical Ethics provide: 'Drugs, remedies or appliances may be dispensed or supplied by the physician provided it is in the best interests of the patient.' Your reference committee reaffirms the 1963 House of Delegates interpretation of the words 'in the best interest of the patient,' which reads as follows:

" 'It is the opinion of the Judicial Council that this language was adopted to permit both the practicing physician and the local medical societies to evaluate the many factual situations incident to prescribing and dispensing which are bound to arise in the practice of medicine. Under this language the doctor is permitted to exercise his own best judgment when caring for his patient. It is known that there will be situations when it is necessary or desirable for a physician to dispense or supply what he has prescribed. The Principles permit this to be done. On the other hand, this broad language provides a means by which a component medical society can inquire into the facts of a particular practice. The profession thus can act to prevent abuse of discretion and protect patients from exploitation. In essence this language means that a physician in the exercise of sound discretion may dispense 'in the best interest of his patient"; it does not authorize him to dispense solely for his convenience or for the purpose of supplementing his income.'

"The reference committee approves the goals sought by the Board's report, but disapproves its specific recommendations. It notes that mechanisms presently exist for processing charges of deviation from the foregoing ethic and urges that these mechanisms be made vitally active at local level. When charges of deviation develop, complaints should be made to the local society and vigorously processed by the appropriate committee of that society. If they are not resolved thereby, the complaints should then be carried to the state constituent association. The prudent physician will always seek the guidance of his local medical society in situations relating to ethical conduct."

The House directed the Board of Trustees to take action as expeditiously as possible to give wide dissemination to the reference committee report.

Discrimination

The House received six resolutions dealing with the subject of discrimination against some applicants for membership in component medical societies. It called attention to the strong position taken by the House in 1964 but pointed out that it is difficult to follow the 1964 directive because there is now no mechanism at the national level whereby a rejected applicant for membership at county or state level may obtain a hearing in order to right an alleged wrongful discrimination.

In lieu of the six resolutions, the House adopted a substitute resolution which directed the Council on Constitution and Bylaws to prepare such changes in the Constitution and Bylaws "as may be necessary to permit the Judicial Council to receive and act upon appeals filed by applicants who allege that they have been unfairly denied membership in a local and/or state society." The House asked the Council to report its recommendations at the 1966 Clinical Convention.

Health Manpower

On the subject of health manpower the House received reports from the Board of Trustees, Council on Medical Education and Council on Medical Service and also one resolution. In general, all of them urged the AMA to assume leadership and mobilize its efforts to meet present and future shortages in health manpower. The House approved the Board report, announcing appointment of a Committee on Health Manpower, and adopted the resolution.

AMA Dues Increase

By a vote of 168 to 46, the House approved an increase in AMA annual dues from $45 to $70, effective January 1, 1967, thus confirming a Board of Trustees recommendation which was given initial approval at the 1965 Clinical Convention.

The House, in approving the dues increase, accepted a reference committee statement which said:

"It is quite apparent that the programs necessary to serve the needs of the members of the Association cannot be conducted effectively without adequate financing and it is equally apparent that such adequate financing is impossible without the dues increase requested by the Board of Trustees. Your Reference Committee reaffirms its confidence in the judgment of the Board of Trustees which has in the past and must in the future exercise the most careful and prudent stewardship over the assets of the Association. The Board of Trustees is the Committee elected by the House of Delegates to investigate and control the finances of the Association. The appointment of any other committee to perform this function would be most inappropriate."

Election of Officers

In addition to Dr. Rouse, the new President-Elect, the following officers were named:

Dr. Eli S. Jones of Hammond, Indiana, AMA Vice President; Dr. Walter C. Bornemeier of Chicago, Speaker of the House of Delegates, and Dr. Russell B. Roth of Erie, Pa., Vice Speaker.

On the Board of Trustees, all for three-year terms, Dr. Homer L. Pearson of Miami, Fla., and Dr. Dwight L. Wilbur of San Francisco were re-elected; Dr. Burtis E. Montgomery of Harrisburg, Ill., was named to succeed Dr. Percy E. Hopkins of Chicago, who did not run for re-election, and Dr. Max H. Parrott of Portland, Oregon, succeeded Dr. Raymond M. McKeown, who was not eligible for re-election.

For the Council on Medical Education, Dr. Kenneth C. Sawyer of Denver, Colo., was re-elected, and Dr. James W. Haviland of Seattle, Wash., succeeded Dr. Melvin W. Breese of Portland, Ore., who did not wish renomination.

For the Council on Medical Service, the House re-elected Dr. Charles J. Ashworth of Providence, R.I.; named Dr. Guy A. Owsley of Hartford City, Ind., to succeed Dr. Montgomery, and elected Dr. John R. Kernodle of Burlington, N.C., to replace Dr. Roth.

Dr. James M. Kolb, Sr., of Clarksville, Ark., was re-elected to the Council on Constitution and Bylaws. Named to the Judicial Council were Dr. Renato J. Azzari of New York City, to succeed Dr. Robertson Ward of San Rafael, Calif., and Dr. George W. Petznick of Cleveland, Ohio, to succeed the late Dr. James H. Berg of Seattle, Wash.

THE REFERENCE COMMITTEE on Reports of Officers, Herbert W. Harris, MD, Chairman, expressed its sorrow at the passing of Dr. William A. Hyland, congratulated Dr. George Slagle upon his election as Chairman of the AMA Council on Medical Service, hoped the Delegation will continue its efforts to elect an MSMS member to higher office in the AMA, and called attention to the increase in AMA dues effective January 1, 1967.

THE HOUSE adopted the report of the Reference Committee.

12. Report of Michigan Medical Service — John M. Wellman, MD, President

Michigan Blue Shield has had a busy and productive year, the extent of which is reviewed here in a report designed primarily to accent the highlights of Blue Shield's activity for the calendar year ending December 31, 1965.

Our presentation varies slightly from previous annual reports to The Council, but it is felt that the new approach will better relate activities of this corporation if made on a calendar year basis, and where appropriate, refer to important developments in the first half of 1966.

A more formal and detailed Annual Report covering the year 1965 will be printed and distributed at Blue Shield's annual meeting of the corporate body in September. That report will be mailed to all physicians in Michigan.

Items of special interest:

- John C. McCabe became Executive Director of Michigan Blue Shield in November, 1965.
- Sidney Adler, M.D., of Detroit, President of Blue Shield since 1961, resigned the office in March, 1966, because of demands from his private practice.
- John M. Wellman, M.D., of Lansing, was elected President of Blue Shield in May, 1966, succeeding Dr. Adler.
- Enrollment reached an all-time high – 3,816,453 members in 1965 compared to 3,517,792 in 1964.
- Growth and stability were reflected further in financial statements showing assets of $53,161,062 and liabilities of $26,040,333 in December, 1965, compared to $43,143,684 in assets and $25,590,844 in liabilities in December, 1964.
- With finances and staff, we assisted the Michigan State Medical Society Committee on Evaluation of Prepaid Medical Services to develop a uniform system of evaluation of medical care in hospitals.
- The merit rating program was implemented.
- The expanded auto benefits program covering obstetrical, psychiatric and long-term convalescent care which starts September, 1966, was finalized.
- Pilot studies were continued on new benefits in the areas of nursing homes, rehabilitative care and internal medicine.
- Preliminary work on home care programs was started as requested in Resolution 40, adopted by the House of Delegates in 1965.
- The Federal Employee Program was added to Blue Shield's regular underwriting business in April, 1966, covering about 74,000 members.
- A television advertising campaign was started in 1966 to strengthen Blue Shield's corporate identity and emphasize Blue Shield as the provider of dependable medical protection. The series ran through the spring and will resume in the fall.
- A public service activity was started centering around three health career promotion leaflets addressed to subscribers and the public. More than 500,000 folders are being distributed through doctors' offices and directly to subscribers with payment notices.

Any detailed discussion of Blue Shield's activities in 1965 must relate to Medicare because it has taken a major portion of staff effort and time since last September, when the House of Delegates of the Michigan State Medical Society recommended that Blue Shield be named carrier for Medicare in Michigan.

This activity has continued into 1966 in preparation for the massive administrative job involved, including acquisition of additional personnel, physical equipment and space, plus development of a program consistent with the major functions required by the government as part of its contract with Blue Shield.

One of these responsibilities involves the determination of reasonable charges. In consultation with the appropriate Michigan State Medical Society committees, Blue Shield has developed a mechanism under which payments will be measured against the statutory criteria, i.e., the physician's customary charge as it relates to charges within the community, and which is comparable to the physician's other patients. While the Michigan relative value scale will be a major guideline in the early stages of Medicare's administration, eventually payments will be measured against charge profiles built on actual payments under the program showing charges by physician, by locale, and by variations in specialty training.

We already have had many orientation meetings around the state with physicians and medical assistants. Attendance topped 3,000 at some 35 meetings, during March through June. We have provided explanatory material to the doctors and the assistants and we will continue to do all that is practically possible to this end.

We expect Blue Shield's 3.9 million annual services will double with Medicare, perhaps even triple when we consider:

1. The possibility of entering into a contract with the State of Michigan to administer Title XIX of the Medicare Program.
2. The complementary coverage program that has been designed to fill in benefits Medicare does not cover.

Four complementary programs are being offered to senior citizens and we anticipate more than 250,000 persons age 65 or over will be enrolled in such programs by July.

Measured in terms of growth, stability, and performance, the year 1965 can appropriately be considered the high point in Blue Shield's 26 year history.

Yet, in another sense, 1965 ends an era while beginning another.

For many years physicians have seen Blue Shield in a dual role. While making positive contributions in the financing of quality medical care for as many Michigan residents as possible, Blue Shield was considered a bulwark against federal involvement in medicine.

With Medicare's passage, some may feel the battle was lost, if not the war. We do not share this pessimism. Blue Shield is on the verge of a new era. It can and must function to insure the continued involvement of the private sector even while government seeks to increase its participation in various ways. This sound intermix of the private and public sector is possible, but more is needed than simply being against government in medicine.

Blue Shield in Michigan must administer more efficiently.

It must play its role more effectively.

It must expand benefit levels to eliminate the need for Medicare expansion.

In cooperation with the profession, we must develop meaningful techniques of utilization review.

We are already looking for effective ways to correct inequities and inadequacies in programs in a manner satisfactory to the profession and the consumer.

The framework for these goals was created in 1965. The effort will continue in 1966.

We would be remiss if we did not recognize past and current dissatisfactions in some professional circles with certain Blue Shield involvements. Yet, Blue Shield has been and will continue to be the most effective mechanism for dealing with the problems of medical economics in a manner which allows for appropriate professional participation in medicine's destiny and gives the consumer better benefit arrangements than can be expected from complete government control.

Needless to say, we look for continuation of the generally solid and good relations between Michigan physicians and Michigan Blue Shield.

THE REFERENCE COMMITTEE on Medical Service and Prepayment Insurance, James B. Blodgett, MD, Chairman, noted with approval the continued growth and stability of the corporation, and commended its pilot studies into new areas of concern to both subscribers and physicians. The Committee also greeted with pleasure the new President and Executive Director, Dr. John Wellman and Mr. John McCabe.

THE HOUSE adopted the report of the Reference Committee.

REPORTS OF THE COUNCIL

13. Remarks of Council Chairman — H. H. Hiscock, M.D.

As Chairman of The Council, I appreciate this privilege of appearing before this House of Delegates to provide supplementary information to the printed Annual Report of The Council which appears in your Handbook.

The Council met yesterday and took certain actions which will be of interest to you.

Before I report on this, however, I would like to remind you that the full Council meets monthly to review all matters of business. I must commend the Council members for their excellent attendance record. The Executive Committee has not met for eight years.

At this time I would like to thank Warren Tryloff and Hugh Brenneman and their staff for the remarkable cooperation I have received in the past eight years. I hope you all realize what a dedicated staff we have in East Lansing.

Council Procedure

I would like to commend The Council on its procedural reorganization, and perhaps I could best do so by inviting to the attention of the House the internal organization and procedural steps through which material must be filtered before it becomes MSMS policy.

We are all aware of the fact that there are four basic varieties of committees in this Society: Standing committees, committees of the House of Delegates, committees appointed by The Council, and committees of The Council. All of these committees make reports to The Council in the interim between meetings of the House of Delegates.

When committee reports are received by The Council they are assigned to one of the committees of The Council (Finance, Publication, County Societies) which sits as a reference committee and reviews the submitted reports. After such review these reference committees report in detail on each item contained in the submitted reports. The Council then as a body acts on reports of the reference committees. Then and only then do the recommendations and advices of the committee become official MSMS policy. The Council in turn, as you know, reports to the House of Delegates, as do the standing committees.

The Advisory Committee to the Executive Director deals with the functioning of the staff and the headquarters building.

Projections for the Future

A great amount of research and development has been carried out during the past year in matters relating to (1) policy communications to the public; (2) wider use of communication media; (3) adaptation of the MSMS organizational machinery to meet future demands.

Specific items among these were the study of ways and means of increasing lay support of MSMS policies, the holding of regular press conferences and the video taping of panel interviews for distribution to television stations, the development of greater liaison with many closely related associations, regularly scheduled conference telephone hookups of the MSMS officers during the time the Legislature is in active session, and increased use of MSMS officers and Councilors in legislative activities.

It should also be noted that within the staff organization a section has been established called the Research and Development Division. This Division is responsible for doing preliminary work in the development of materials which may subsequently be of prime concern policy-wise to the Society or be subsequently included among its membership services. As an example, the use of computers by the MSMS organization and the medical practice generally is now being explored.

Yesterday The Council approved details regarding plans for the continuation of the very successful public educational effort, the MSMS Healthmobile. The Michigan Health Council wishes to take over the project, and The Council has agreed to make a financial grant to help support this project under MHC auspices. In addition, one of our staff will help in arranging the various details in connection with its display throughout Michigan. This will free one secretary to work on legislative matters on the county society level.

MSMS for the last ten years has been privileged to have as its Legal Counsel Mr. Lester P. Dodd. His wise counsel has been of extreme value to Michigan medicine. Mr. Dodd will, I hope, be associated with MSMS for many more years. The Council, however, recognized that Mr. Dodd requires some assistance as MSMS requirements for legal advice increase.

The Council, therefore, is proud to announce that, effective December 1, Mr. Dodd will become General Counsel of MSMS and Mr. Stewart Kerr, a partner in Sweeny, Dodd and Kerr, will become MSMS Legal Counsel. Mr. Dodd will continue to write legal opinions and to serve as adviser to the Judicial Commission and the House of Delegates. Mr. Kerr will work with The Council and the MSMS committees which require his experience and good advice.

Every three years the House of Delegates requests its Committee to Study the Financial Structure of MSMS to report. This Committee, chaired by Dr. Fryfogle, is reporting to you this year after a thorough and detailed review of MSMS finances. Since the time that Committee's report was prepared, The Council has received some questions regarding finances. Though most of the questions are being answered in reports being made directly to you, The Council has referred these questions to the House of Delegates Committee to Study Financial Structure. The Council and its Finance Committee will continue complete cooperation with your Study Committee.

Since our financing is so important, I would ask now that Finance Committee Chairman Robert Whiteley, MD, amplify on his financial report. Dr. Whiteley.

ROBERT K. WHITELEY, MD: Mr. Speaker and Members of the House of Delegates:

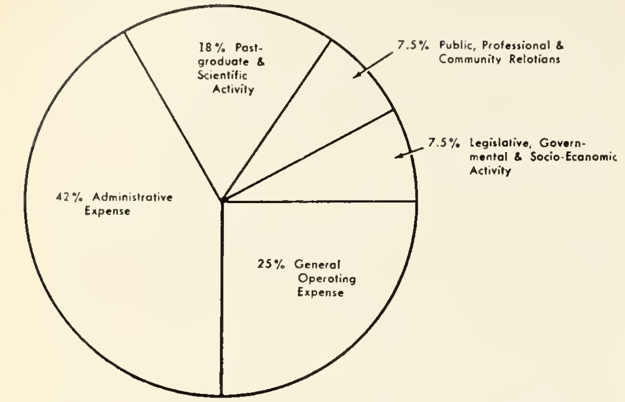
You have on your desks copies of my remarks which will supplement the paragraphs on Finance which appear in the Annual Report of The Council, Part I, page 3. I won't repeat the detailed information which appears there but emphasize certain points.

Attached to my printed remarks is a chart showing the sources of MSMS income and distribution of expense for fiscal 1966. In graphic form this quickly shows that about one-fifth of the MSMS income is received from sources other than dues. Eighty-three per cent of our income is derived from membership dues.

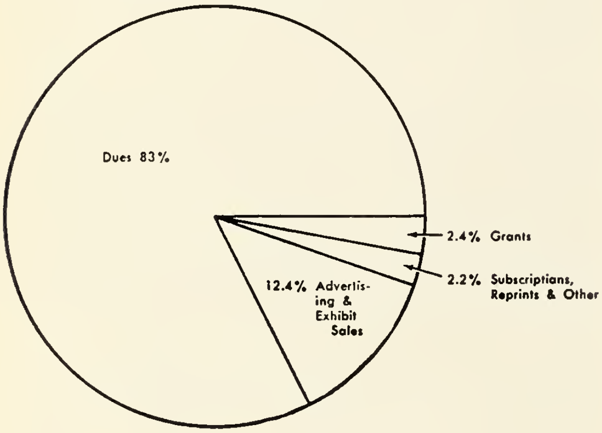
MSMS expense distribution is 42 per cent Administrative (including all wages and salaries); 25 per cent General Operating Expense (including printing, telephone, building operation, supplies, and maintenance of building equipment); 18 per cent Postgraduate and Scientific Activity; 7.5 per cent Public, Professional and Community Relations, and 7.5 per cent Legislation, Governmental and Socio-Economic Activity.

This simplified financial reporting is made possible in part by the adoption this year of a new system of budget development and expenditure control based upon staff recommendations developed with the aid of the Alexander Grant Company, Certified Public Accountants. The Council now is better able to plan expenditures and observe the effective utilization of finances measured against budget projections.

Financing of increased activities in 1966 was made possible by an income in dues of $10 as directed by the House last year. The Council used these funds to (1) add new employees creating a new Department of Govern-



% Distribution of MSMS Expense



% Distribution of MSMS Income

mental Medical Care Programs; (2) improve its legislative contact program by reorganizing staff functions and adding new personnel, and (3) increase community relations activity by assigning a full-time man to aid local programs and assure the greatest possible public relations value of the successful Healthmobile project inaugurated last year at the Centennial Session.

All these activities have been carried on without diminishing MSMS continuing concerns and responsibilities in the areas of postgraduate and scientific activity, interprofessional liaison, and the important work of implementing the recommendations of standing committees of MSMS as well as committees of the House of Delegates. The details of these functions will be found in the annual reports of more than 100 committees in your Handbook.

One of the points I would like to emphasize was studied by your House of Delegates Committee to Study the Financial Structure of MSMS. Its Annual Report deals with the details and the impact of the recent inflationary pressures on the MSMS cost of doing business. The Council will take this trend into consideration as it develops its 1967 budget projects, and will continuously observe the cost changes on our operation, making adjustments to minimize as much as possible untoward effects of inflation on the total MSMS program.

Regarding investments, which include reserve for depreciation and replacement of equipment and furnishings, The Council, because of the changing money market, was able to transfer some of its investments into assets more liquid than government bonds and thus increase the yield appreciably.

Overall, the current status of MSMS finances is sound. The financial management is more efficient than ever before.

MSMS has no long-term debt, but engages in short-term borrowing during low-income months to even out its cash flow. By this method, MSMS maintains reserves which earn interest which nearly offsets the cost of short-term borrowing. This is the least expensive method by which MSMS can maintain sufficient cash flow, while gradually reducing its borrowing requirement.

Officers and staff will be present with me at the Reference Committee meeting to discuss these financial matters with you individually.

HAROLD H. HISCOCK, MD: Thank you, Dr. Whiteley.

Gentlemen, as providers of medical care we are the front line in the universal efforts to extend, improve and finance health care.

Because of this, never before has the need for professional unity been so great. Our profession is in the midst of efforts to change the socio-economic aspects of medicine.

I know that the younger doctors of today say that times have changed and we must go along with them; but there is one basic ingredient of quality medicine that must never change— the implied contract between the patient and his physician.

Government financing is exerting tremendous pressures to change this relationship.

Medicine must be strong enough to retain the basic principles of practice in which it so strongly believes, and the only way it can do it is through a unified profession.

We must not have one specialty pitted against another or ignored by the rest of the profession. We must not have a hospital staff pitted against another hospital staff.

That is why each county medical society must be the policy-making board for all the medical profession in the community, and why its decisions must be honored in all hospital staffs, clinics and doctors' offices.

I don't think it is old-fashioned to remind you that third parties, hospitals and agencies can't practice medicine. You and I, gentlemen, are the ones who practice medicine — one patient at a time at the hospital bedside, in a quiet room in our office or in the home of a patient. It is we who must exert our collective energies to see to it that suitable terms and conditions of medical care are incorporated into the rules and regulations of new agencies which are assuming responsibility for the financing of health care. We must resist the intrusion into the private relationship of physician and patient so we can preserve that most basic ingredient — high-quality medical care.

But, if we succumb to factionalism and allow ourselves to be divided, the greatness of American medicine will begin to crumble.

United we stand, divided we fall.

THE REFERENCE COMMITTEE on Reports of the Council, D. N. Sweeny, MD, Chairman, reviewed the remarks of the Council Chairman with the exception of items referred to other reference committees and saluted the remarkable energies of The Council and its chairman, expressing appreciation for their work. The Committee looked forward to the work emanating from the new administration division of Research and Development and it considered stimulating the Council's projections for the future.

The Committee expressed its gratitude for the invaluable service of Legal Counsel Dodd to MSMS and welcomed Mr. Stewart Kerr as an additional valued consultant.

THE HOUSE adopted the report of the Reference Committee.

14. Annual Report of the Council

PART I

Report of Council Activities

This section of the report contains a brief review of the activities and actions of The Council covering the period from September, 1965, through July, 1966.

Minutes of the monthly meetings of The Council are distributed to component medical societies and members of the House of Delegates. In addition, abstracts of Council actions appear monthly in *Michigan Medicine*. For this reason, the details of Council actions and decisions are not outlined in this review. Instead, The Council wishes to point to a few of the major successes and problems in a general way.

Governmental Medical Care Program. Since the passage of the Social Security Amendments of 1965 — the so-called Medicare law — the new Committee on Governmental Medical Care Programs has been very active in complying with the mandates of the House of Delegates. These were:

1. To keep abreast of current developments in governmental medical and health care;
2. To anticipate new governmental health measures proposed by or for government at any level;
3. To establish an effective liaison with governmental agencies' personnel for implementing health programs; and
4. To advise on MSMS posture in relation to governmental programs and their implementing regulations.

The Committee's initial responsibility was negotiation with the fiscal intermediary concerning fees for physicians' services under Title XVIII(B) and the recognition of the need for negotiating a single, truly uniform method of payment for physicians' services, which must be based on usual and customary fees, for all governmentally-sponsored medical care programs.

The Council approved the following recommendations of the Committee:

1. That The Council reaffirm using the Michigan 1965 Relative Value Study with a $5 conversion factor as a guideline (for physician payment under Titles XVIII and XIX);
2. That The Council reaffirm the absolute necessity of annual review of both the Relative Value Study *and* the conversion factor;
3. In consideration of the recognized variation in existing fees, and with recognition that the law permits any physician to elect to receive an assignment, The Council recommends that under Public Law 89-97 every physician deal directly with the patient in both medical care or service and reimbursement and that every physician should submit to the patient his own charges based on his usual, customary and reasonable fees.

MMS has submitted a payment mechanism proposal to the Social Security Administration.

The Committee has also been in negotiation with the Office for Dependents' Medical Care. Officials of the ODMC and MSMS have reached a tentative agreement on these negotiations and, upon the clarification of a few minor points, should shortly conclude a renegotiation of this program with an improved fee schedule.

Meetings have also been held with the Veteran's Administration on the Veteran's Hometown Medical Care Program, and the letter of agreement between the Veteran's Administration and MSMS has been signed. The fee schedule has been substantially improved.

The Committee has also extended its area of responsibility by recommending the establishment of a liaison committee to include a representative from MSMS, Michigan Department of Health, Michigan Hospital Service and Michigan Medical Service. The purpose of this committee will be directed to matters of utilization review as it relates to Public Law 89-97; the MSMS representative is specifically charged with the responsibility of reporting all pertinent information and data to the Committee on Governmental Medical Care Programs for information and such necessary action as the Committee on Governmental Medical Care Programs deems advisable.

The Council, through this Committee, also has been deeply involved with dissemination to MSMS members of informational and technical material on rules and regulations that are proposed from the Department of Health, Education and Welfare, the Michigan Department of Social Services, the Michigan Department of Public Health and the Michigan Department of Mental Health. Effective liaison has been established with all of these federal and/or state agencies for the purpose of ascertaining the new rules and regulations promulgated by these agencies so that the Committee on Governmental Medical Care Programs can furnish this vital information to every physician in the state.

The Council also submitted nominations to the Department of Social Services (Title XIX) for appointment to its Medical Advisory Committee.

The new MSMS Governmental Medical Care Programs Committee and staff have moved with vigor in this important area. For details see Annual Report of this Committee.

Recommendation Re Medical Staff Surveys of Hospitals in Michigan. In response to a specific request, The Council considered the matter of medical surveys of hospitals. The Council determined that MSMS should take leadership in this area if requested. Having made this broad decision, it requested one of its standing committees to study the matter and present recommendations. These recommendations will be presented to the House in the Annual Report of the Hospital Relations Committee.

See Recommendation 1, Part IV.

Remuneration of Officers. In 1965, The Council, after detailed study, recommended to the House of Delegates in its annual report: "(1) That MSMS not remunerate AMA Delegates beyond expenses, (2) that MSMS not remunerate Councilors beyond expenses and (3) that remuneration of component medical society officers be left to the discretion of the component societies."

The 1965 Reference Committee recommended that "The Council consider the possible future necessity for remuneration to the officers" because of added responsibilities due to Medicare. The Council reviewed the matter again and reaffirmed its 1965 recommendation to the House of Delegates.

See Recommendation 2, Part IV.

Resignation of MSMS Secretary Wiley. The Council, with regret, accepted the resignation of D. Bruce Wiley, MD, as MSMS Secretary, in May. Dr. Wiley accepted a full-time position with the Michigan Department of Health and retired from active practice.

The Council also recommended to the MSMS Awards Committee and the House of Delegates that Dr. Wiley be suitably recognized by the delegates for his long record of faithful service to Michigan medicine.

New Secretary Elected. Oliver B. McGillicuddy, MD, Lansing, was elected by The Council at its July Meeting as the new Secretary of MSMS. Dr. McGillicuddy will fill the vacancy created by the resignation of D. Bruce Wiley, MD. President of MSMS in 1964-65, Dr. McGillicuddy has been a member of The Council for 13 years and served as its chairman for two years.

Death of MSMS Treasurer, William A. Hyland, MD. In July, MSMS suffered a great loss in the passing of William A. Hyland, MD, long-time Treasurer of the Society. He was eulogized in the August issue of *Michigan Medicine* for his outstanding record of service to medicine, business, education and the community. Dr. Hyland served as MSMS President in 1946-47 and was elected in 1952 by The Council to the position of Treasurer, a post he held for 14 years. A complete article on the contributions of Dr. Hyland will appear in the September issue of *Michigan Medicine*. The Council will sorely miss his wise counsel in financial matters.

Finance. The Council adopted a new system of budget development and financial reporting based upon staff recommendations developed with the aid of the Alexander Grant Company of Detroit, Certified Public Accountants. By means of the new managerial procedures, The Council and its Finance Committee are provided with comprehensive financial information showing the current status of all budget items and the overall financial position of MSMS. The Council now is better able to plan expenditures and observe the effective utilization of finances measured against budget projections. Through more effective budget planning, The Council now is able to more accurately predict income and expenditures.

The technical aspects of accounting procedures have been appropriately redesigned and continuing study is being given to the feasibility and desirability of incorporating the use of electronic equipment.

MSMS reserves total $115,270, invested in time certificates, government bonds and savings accounts. This liquid reserve is retained for contingencies.

Short-term debt has been reported each year since the construction of the new building began. On July 1, 1966, MSMS had no outstanding notes; however, as in the past, it will be necessary to reborrow during the closing months of the year and repay in the early months of 1967 when dues income is high.

At the end of fiscal 1961 outstanding notes totaled $200,000.

At the end of fiscal 1962 outstanding notes totaled $150,000.

At the end of fiscal 1963 outstanding notes totaled $125,000.

At the end of fiscal 1964 outstanding notes totaled $100,000.

At the end of fiscal 1965 outstanding notes totaled $170,000.

Due to the unusual expenses incurred during the celebration of the MSMS Centennial the short-term indebtedness was not decreased in 1965. At the end of fiscal 1966 it is anticipated that short-term notes will total $150,000.

The sharp inflationary movement in the first half of 1966 has substantially increased the cost of doing business in specific areas such as printing, taxes, supplies and services.

The 1965 House of Delegates increased MSMS dues by $10 per year for the purpose of: "(1) Liaison with governmental agencies in the implementation of Medicare; (2) Improved legislative contact with the State Legislature; (3) Increased community relations activity."

MSMS activities in the areas of community and public relations, legislative action and governmental medicine were considerably increased.

The Council authorized extensive use of the Healthmobile (first shown to MSMS members at the Centennial Session) in connection with re-chartering ceremonies of component societies. More than 80,000 children and adults have passed through the Healthmobile exhibits. (See Healthmobile report in Relations Section of the Annual Report).

In the area of governmental medical care programs, The Council employed Herbert Mehler to staff the new Committee created by House of Delegates resolution. (See Report of Governmental Medical Care Programs Committee.) This Committee has been responsible for negotiating with various governmental agencies re fee schedules, improving contract terms and reporting to the membership re Medicare Title XVIII and Title XIX rules and regulations.

The MSMS public relations effort was strengthened by revisions in the Detroit regional office. E. Ray Scott was transferred to Lansing as Legislative Assistant. A new PR assistant was retained for the regional office, Peter Hoheisel.

In the legislative area, following Mr. Scott's resignation in mid-year, The Council is in the process of employing a legislative assistant to bring the full-time legislative staff up to the full complement of two.

Necessary secretarial assistance to the new employees also has been provided. Thus, The Council believes it has effectively utilized the increased dues income to enhance the MSMS effort and effectiveness in the areas of public and community relations, legislative activity and governmental medical care.

Membership. Total membership in MSMS as of June 30 and December 31, from 1935 to 1966:

Year	*June 30*	*December 31*
1935	3410	3543
1945	4425	4686
1955	5503	6109
1960	6660	6715
1962	6776	7018
1964	6954	7294
1965	7247	7563
1966	7296	

Medical Aid Station at Capitol Building. This highly successful MSMS project, in cooperation with the physicians of the Ingham County Medical Society, to provide a medical aid station in the Capitol building for members of the Legislature was again operative during 1966. MSMS defrays the expense of a staff nurse and local physicians volunteer to serve in emergencies and take referred calls.

The Council once again expresses its appreciation to the Ingham County physicians who participate in this worthwhile service to lawmakers.

Heart, Cancer and Stroke Program. Details regarding MSMS participation in plans for Heart, Cancer and Stroke regional activities will be found in the Annual Report of the Education Liaison Committee. The Council appointed representatives to serve on the several planning groups. In addition, The Council appointed Don Marshall, MD, as MSMS representative to the Board of Directors, Michigan Association for Regional Medical Programs.

Presentation from Parke, Davis & Company. The Council accepted the offer of Parke, Davis & Company to give to MSMS four History of Medicine paintings on the occasion of the pharmaceutical company's centennial. These will be officially presented and displayed at the 1966 Annual Session.

Physician-Pharmacist Code of Understanding. Upon recommendation of the Liaison Committee with Michigan State Pharmaceutical Association, The Council amended and approved a Physician-Pharmacist Code of Understanding which will be presented to the House in the above Committee's annual report with The Council's recommendation that this be adopted by the House.

Financial Assistance to Needy Physicians. In 1965, the House adopted the following recommendation of The Council contained in its annual report which resulted from a request for study by a previous House of Delegates:

> "The Council recommends, with regard to needy physicians and their dependents, that although there is apparently no great number of physicians in Michigan who require aid, based on previous MSMS committee surveys, some state fund should be instituted to meet the need that does exist, financed through an increase in dues, and such a state fund should be administered on a matching basis with component medical societies."

The Council has forwarded this 1965 recommendation to the 1966 House Ways and Means Committee for consideration, and report to the House.

Separate Billing by Specialists. In accordance with previous policy, The Council reaffirmed "and emphasized its policy supporting separate billing for the professional aspect of radiology, anesthesiology, pathology and physiatry services . . ." through appropriate MSMS publications.

Definition of a Specialist. The Council adopted the following definition of a specialist and trasmits it to the House:

(1) A physician who has certification by the appropriate specialty board approved by the Advisory Board for Medical Specialties and by the AMA Council on Medical Education, and who primarily limits his practice to that specialty in which he is certified, *or*

(2) A physician not possessing specialty board certification but who:
  (a) Has completed an approved residency in a specialty; and
  (b) Has at least four years experience in that specialty (including the recognized residency); and
  (c) Limits at least 50 percent of his practice to that specialty; and
  (d) Is recognized as a specialist by the hospital in which he practices, providing it is an accredited hospital;
  OR
  (e) Graduated from medical school before 1945 and is recognized as a specialist by an accredited hospital.

See Recommendation 3, Part IV.

Committee on Michigan Medical History. A new committee was appointed by The Council to maintain continuous interest in Michigan medical history. The Council has recommended to the Constitution and Bylaws Committee that this be a permanent MSMS committee and be so indicated in the Bylaws.

In general, the Committee will record events of historical interest as they occur and inform the membership of interesting historical data through appropriate media. The research and writings of this Committee will generate necessary documents to provide a detailed record of past and current medical events in Michigan.

Eighth Michigan Delegate to AMA. In February, the American Medical Association notified MSMS that, because of the growth of MSMS membership, it is now entitled to an eighth delegate to the AMA. Certification of the eighth delegate was required promptly.

Though the MSMS Bylaws do not provide for such an emergency appointment or election, The Council followed the procedure used by other state associations which appointed an alternate delegate to serve.

The Council appointed the ranking alternate delegate, Ralph R. Cooper, MD, to serve the 1966 term. No additional alternate was appointed. The 1966 House of Delegates will elect an eighth delegate and alternate for the term beginning January, 1967.

Since the Bylaws need clarification regarding this appointment procedure, a communication was forwarded to the MSMS Constitution and Bylaws Committee for study and report to the House of Delegates.

RELATIONS — PROFESSIONAL, PUBLIC, LEGISLATIVE AND PREPAYMENT PLANS

This report highlights only some of the major public relations ventures as MSMS sought to inform and influence the general public and special audiences. The details are contained in the Annual Report of the Public Relations Committee.

MSMS Healthmobile. The major MSMS effort in community relations this year was the MSMS Healthmobile, a 12′ x 50′ health-museum-on-wheels. Dedicated at the 1965 MSMS Centennial Session, the mobile unit has traveled across the state under the sponsorship of county medical societies to tell school children and adults about the exciting Michigan developments in medical research and health care. The unit, built to MSMS specifications, was loaned by the Marlette Coach Company. Special exhibits were developed by the three medical schools, the Michigan Department of Public Health, the Upjohn Company, Parke, Davis & Company, Michigan Health Council and AMA. Other authentic displays helped to develop the slogan, "A Century of Service in Medicine." The Healthmobile first appeared in Ingham County on October 15 and traveled into a different community each week, with the local Woman's Auxiliary serving as hostesses in the Healthmobile. Excellent cooperation was obtained from city and school officials, power companies, police departments and mass media. By July 1, the Healthmobile had visited 33 communities. Estimated attendance for October 15 - July 1 was 80,000, including 50,000 children. Contributions towards the cost of developing the Healthmobile included $10,500 from the Sears-Roebuck Foundation, $1,000 from Merek, Sharp & Dohme and a contribution from the AMA.

Rechartering of Component Medical Societies. As part of the MSMS Centennial Celebration during 1966, MSMS presented new charters to component societies. Presentations were arranged during the visit of the Healthmobile with suitable attendant publicity. Ten societies were able to schedule these rechartering ceremonies. Two are scheduled for September and October.

The Council plans to continue the rechartering ceremonies during the coming year for other societies who wish to schedule them.

Career Recruitment. This was an extremely busy year for MSMS in the career recruitment field. Not only were thousands of career folders distributed to school children through the MSMS Healthmobile, but also 10,000 copies of a new career booklet were issued to school counselors, libraries, etc. MSMS was the only state to tie in with the AMA in the production of its new "Horizons Unlimited" career pocket book for students, parents and teachers. MSMS adapted the pocket book with an eight-page yellow insert telling students where they can pursue 51 different health careers at 116 Michigan colleges, hospitals and institutions. The insert also was printed for broadside distribution by the Woman's Auxiliaries, Michigan Health Council, hospitals and other allied groups.

Conference on Medical News Reporting. MSMS drew 60 editors, reporters, freelance medical writers, journalism professors, physicians and others to Michigan State University for a one-day workshop, co-sponsored with several other groups. The conference helped deepen channels of effective communication between physicians and the press. (Throughout the year MSMS issued news releases about timely and important subjects and staff members worked to further improve rapport with reporters and editors.)

Radio and Television. Each week, MSMS effectively reached thousands of Michigan residents through radio and television.

An informative series of 15-minute radio tapes was carried weekly by about 40 stations. A series of 5-minute tapes was started this year and was well received by Michigan radio personalities, newscasters and disc jockeys. The services to radio stations were offered by the MSMS Committee on Scientific Radio and Television. Special subjects this year included medical manpower and medical education.

Often the "Formula" program, produced weekly over WJIM-TV, Lansing, by the Michigan Association of the Professions, dealt with health topics and featured MSMS members. The half-hour interview programs tied in with many MSMS projects, and covered also the topic of medical education in Michigan.

Liaison with Component Societies. Communications were maintained throughout the year with county medical societies to suggest possible public relations projects. Specific how-we-did-it information was presented by 12 different counties during the 1966 MSMS Officers Conference at the

Wayne County Medical Society building, February 25-26. All but 15 of the 55 component societies were present — setting a new attendance record.

These highlights tell about only a few of the many special and ongoing public relations efforts carried out during 1965-66 by the MSMS Public Relations Committee and by staff members. See the Annual Report of the Public Relations Committee for information about Community Health Week, first open house at the MSMS building for senior medical students, rechartering ceremonies by county medical societies, use of the MSMS Century of Service in Medicine publication, distribution of health pamphlets, physician speakers, etc.

Legal Affairs. Facing a "carry-over" of more than 1,000 bills introduced during the 1965 legislative session but not acted upon, plus an equal number of new proposals introduced in 1966, the Legal Affairs Committee, The Council, and indeed the entire Society felt the impact of Capitol affairs to a greater extent than in any previous year. At one point, eighty-three separate bills of significant interest to medicine required the attention of the Society.

MSMS legislative agents and entire headquarters staff, and literally hundreds of individual physicians, were called upon as never before to present facts to the Legislature to protect the best health interests of the people of Michigan. Podiatrists, chiropractors, optometrists, osteopaths, nurses, and other health groups were engaged in massive, all-out efforts to gain the adoption of special interest legislation. The Council instructed its representatives to speak forthrightly on all issues where the quality of health care would be endangered, even though such action might antagonize the vigorous proponents of a particular bill.

At the height of the legislative session, one of the MSMS two registered legislative agents accepted another position; to counterbalance this loss, Society members themselves redoubled their efforts. Major health issues, as voting records clearly showed, transcended partisan politics and many legislators of both parties supported the Society's views. Nonetheless, persistent pressures by a small number of majority party leaders, in a position to exercise great power in the legislative process, succeeded in steering some undesirable legislation through both houses and to the Governor's desk.

For example, a chiropractic bill passed in highly undesirable form, although MSMS was responsible for amending it repeatedly to remove its blatantly undesirable features. A podiatric bill passed, over the concerted opposition of not only medicine but hospital, labor and insurance organizations.

Throughout the entire legislative session, organized osteopathy consistently confined its entire effort to its attempt to establish an osteopathic college, turning its back on many poorly-conceived bills and refusing to oppose them in the fear that such action would jeopardize their own single project. Osteopaths placed three lobbyists in the State Capitol with but one charge — "work on nothing but SB 272."

A full accounting of the 1965-66 legislative year is to be found in the Annual Report of the Legal Affairs Committee; it indicates that MSMS had several successes, along with some major losses. Throughout the most critical legislative year in Society history, however, The Council and the entire membership, through issue after issue of "Medigram," were currently informed and, whenever called upon, performed yeoman service in urging good legislation and opposing bad legislation.

In its 1965 report, The Council noted that "legislative activities can no longer be confined to a portion of each year but must continue unabated throughout the entire year." The Council now wishes to underline and emphasize that prophetic statement and to add to it another observation: It is easier and more effective to influence the course of legislation by sending the right people to the State Capitol than it is to attempt to persuade the wrong people, once they have been elected.

The Council recommends that physicians become personally and vigorously active in the election process itself, and that after the election each winner of a legislative seat, whether he was supported or opposed for election, be known to his physician constituents. There must be not one but many physicians who personally become well acquainted with each state senator and state representative. Unless doctors of medicine are readily available to these lawmakers for advice on health matters, they will turn, as many have, to other less knowledgeable sources.

Liaison with Michigan Health Council. The Michigan Health Council continues to expand its Professional Placement Program. It has now been responsible in whole or in part for the placement of nearly 700 doctors of medicine in Michigan.

Other major efforts include the development and expansion of coordinated home care programs, serving as the coordinating organization for the Michigan Council on Smoking and Health and promoting health careers. Four major conferences were sponsored by MHC on Voluntary Health Day during Centennial Week, including the First National Symposium on Health Careers which attracted delegates from over 30 states. A special Health Careers Congress was held in May at Sault Ste. Marie. The Council co-sponsored "Horizons Unlimited" and in cooperation with the Medical Auxiliary is distributing this career publication to students and counselors.

More than 100 health educational television programs were produced by The Council during the past year. In addition, special telecasts were arranged during the 1965 Community Health Week.

Liaison with the Michigan Association of the Professions. MSMS can look with pride on its work with MAP.

MAP's Seventh Annual Congress of the Professions which was held during "Professional Week" (May 8-14) presented, in addition to other nationally known speakers, Dr. Ernest B. Howard, Assistant Executive Vice President of the American Medical Association. Supporting medicine's philosophy, among the resolutions passed at the Annual Business Meeting were those which: (a) urged the Department of Licensing and Regulations to place the trades in a division separate from that division governing the registration of the professions; (b) supported the constitutional principle that all new institutions of higher education should first have the recommendation of the State Board of Education; (c) urged more educational television stations in Michigan.

MAP joined MSMS and the Michigan Health Council in sponsoring "Community Health Week" and will assist in a statewide "Get Out the Vote" campaign.

Thirty-three doctors appeared on the weekly MAP sponsored television program "Formula" (Channel 6, Lansing) and the 21 programs devoted entirely or in part to medicine in 1966 were valued at over a hundred thousand dollars. "Formula" reaches 250,000 persons each week.

Strong successful support, by the sending of a special delegation to Washington, D.C., was given HR 10 (amended), the Keogh Act. Additional support from other associations of the professions was urged via the new national newsletter COMPASS. MAP has the only pension plan offered by an association in Michigan established under the Keogh Act and approved by the Internal Revenue Service.

MONITOR, monthly publication of MAP, carried information of MSMS to members of other professions and vice versa. Hundreds of doctors of medicine have taken advantage of MAP's business services.

MAP-type organizations have been formed in nine other states and one territory. Several other states are now in the process of organization.

MAP exhibited the new symbol of the professions, created in bronze by Sculptor Marshall M. Fredericks, in the MSMS Healthmobile.

Postgraduate Education

Through the hard work of several committees, MSMS can report an expanded program in postgraduate education this past year. Details can be found in the annual report of the several committees.

Postgraduate Medical Education Programs. Thirty-seven programs — many of them featuring clinical conferences at the hospitals for the first time — were offered across the state by the Committee on Postgraduate Medical Education. A total of 801 physicians participated for about 60.9 per cent of the MSMS members in the 20 geographic areas served. Attendance was even better in the Upper Peninsula, where the eight programs in the fall and eight in the spring drew 190 doctors — or almost 80 per cent of the MSMS there.

Increased emphasis was placed on the clinical conference approach to continuing medical education, with medical educators as the experts. Where such conferences cannot be arranged, MSMS provides didactic lectures by medical authorities for county medical society meetings.

Because the MSMS Annual Session was held in Detroit two consecutive years, the Committee sponsored a clinical conference in Grand Rapids, December 9, 1965, with 103 physicians participating.

Michigan Medicine. One of the major purposes of *Michigan Medicine* is its fine series of postgraduate educational articles. Requests from other medical journals, from pharmaceutical firms and from allied health organizations to reprint Michigan articles are an index to the quality of the scientific articles. George H. Lowrey, MD, Ann Arbor, was appointed Scientific Editor to succeed C. J. Tupper, MD, when he left Michigan in January to become dean of medicine of the University of California at Davis. In each issue, Doctor Lowrey and the Publication Committee attempt to provide high-quality articles of interest to the general practice men as well as the various specialists.

In order to improve printing schedules and controls, the printing operations of Michigan Medicine have been transferred from St. Paul, Minnesota, to Lansing beginning with the October issue.

Conference on Medical Aspects of High School Sports. For the first time, MSMS sponsored a one-day conference at the University of Michigan Medical School to assist the many members who serve as high school team physicians. A total of 78 doctors, representing 28 county societies, participated.

Fifth Annual Conference on Maternal and Perinatal Welfare. Held at Flint with the financial support of the Clara Elizabeth Fund, this Conference drew 260 physicians and guests on March 24-25, 1966. A vital part of the total MSMS postgraduate program, this Conference is effectively sponsored each year by the Committee on Maternal Health.

Diet Therapy Conference. MSMS sponsors each year a Diet Therapy Conference with the Michigan Department of Public Health, as part of its postgraduate educational effort. The 1965 Conference was one of the highlights of the MSMS Centennial Week in Detroit.

Medical Socio-Economics and Research

Long Range Planning. The Committee on Medical Socio-Economics has made substantial progress on its long-range planning project of having experts prepare position papers dealing with the environment in which medicine will be practiced in 1980.

To date the Committee has received and reviewed the following papers:

(1) "The Inter-relationship of the Medical Profession and the Public" by Odin W. Anderson, Ph.D., of the University of Chicago.

(2) "The Influence of Health Insurance on the Future Practice of Medicine" by Charles Hall, Ph.D., of Temple University.

(3) "Future Physician Manpower Needs" by Grant Osborne, Ph.D., of the American Medical Association.

The following additional papers have been contracted for and will be submitted to the Committee sometime in late fall or early winter:

(1) "The Influence of Medical Facilities on the Future Practice of Medicine" by Ray Brown, Director of Graduate Program in Hospital Administration, Duke University.

(2) "The Influence of Closed Panel Direct Service Plans on the Future Practice of Medicine" by Caldwell B. Esselstyn, MD, Executive Director, Community Health Association, Detroit.

(3) "The Influence of Government Plus Other Factors on the Future Practice of Medicine" by Herbert S. Klarman, Ph.D., School of Hygiene and Public Health, Johns Hopkins University.

(4) "The Future of Medical Education" by Charles J. Tupper, MD, of the University of California.

(5) "The Future of the Professions and Professional Organizations" by Hugh W. Brenneman, Executive Director, Michigan Association of the Professions.

(6) "The Future of Organized Medicine" by Leland S. McKittrick, MD.

Tentative publication plans have been made so that the expert opinions contained in the papers can be distributed widely to component medical societies just as soon as the project is completed.

Revised 1965 Michigan Relative Value Study. The Committee on Relative Value Study made revisions in the 1965 Michigan RVS. These included a Relative Value Scale for Professional Services in the Diagnostic Radiology Section as well as some corrections in the Medical Section. These changes should be completed in time for presentation to the House of Delegates in September.

Because of the use by Medicare of the Michigan RVS as a guideline in measuring usual, customary and reasonable fees, The Council believes that consideration should be given to printing the 1965 RVS as revised by the 1966 House.

See Recommendation 4 — Part IV.

Professional Liability Insurance. The Council is deeply concerned that professional liability insurance premiums for Michigan physicians, especially in selected metropolitan areas, are rising precipitously. Research indicates that National Bureau companies doing business in Michigan are sustaining losses of $136 for each $100 in premiums for physicians and $125.20 for each $100 in premiums for surgeons. The Medical Protective Company, which writes the largest share of professional liability insurance in Michigan, reports a loss experience on surgical specialists in Michigan which far exceeds the National Bureau figures. Many Michigan physicians can expect to pay substantially higher premiums when their present policies come up for renewal. This will be especially true of Medical Protective policyholders in surgical categories who practice in certain geographical areas of high claim experience.

The Council has alerted component medical societies to this situation and refers this matter to the House of Delegates for study by an appropriate committee, this recommended study to include consideration of the Pima County, Arizona, pre-trial plan and impartial expert plan.

See Recommendation 5 — Part IV.

Welfare Fee Schedule Survey. The Committee on Uniform Fee Schedule for Governmental Welfare Agencies and the MSMS staff conducted a survey of all Michigan counties to ascertain fee schedules currently being used by various county Departments of Social Welfare to pay physicians for their services. The results of this survey were sent to all county medical societies to assist them in their local negotiations on the 1964 Michigan Uniform Fee Schedule for Governmental Welfare Agencies (red book).

Conversion Factor for 1965 Michigan RVS. A conversion factor of $5.00 for the 1965 Michigan Relative Value Study was approved by The Council at its March meeting. upon the recommendation of the House of Delegates Committee to Determine Monetary Value Unit of the Relative Value Scale. The Committee's deliberations involved considerable staff research which described changes in the Bureau of Labor Statistics Consumer Price Index from 1957 through 1965 as well as average spendable income levels of families in various areas of the state.

Hospital Utilization Review Manual. The Committee on Evaluation of Prepaid Medical Services, with the approval of The Council, developed a suggested methodology in the form of a manual text to assist hospital medical staffs in carrying out their responsibility for evaluation of patient care under the Medicare Act (PL 89-97).

The manual also contains an appendix of diagnostic and therapeutic criteria which are intended for local adaptation as the Committee recognized the fact that the criteria are flexible and may vary in different localities in the state.

Copies of the manual were sent to all Michigan hospitals and the Committee has inaugurated a series of 5 or 6 regional seminars to answer questions regarding the Manual. The Council expresses its appreciation to the Committee and all those who by serving on the Physician Criteria Development Panels accomplished the necessary research and development to bring this project to a successful conclusion.

PART II

Annual Reports of Committees

Annual reports from the following committees have been reviewed by The Council:

Committees of The Council

Alcoholism and Drug Addiction
Awards
Beaumont Memorial
Courses on Medical Economics and Ethics
Disaster Medical Care
Medicare
Medicine and Religion
Nursing
Rehabilitation
Retirement Plans
Uniform Fee Schedule for Governmental Welfare Agencies
Veterans Affairs
Workmen's Compensation
Liaison with Michigan Crippled Children Commission
Liaison with Michigan Hospital Service
Liaison with State Bar of Michigan

Committees of the Society

Advisory to Michigan State Medical Assistants Society
Advisory to Woman's Auxiliary
Blood Banks
Cardiac Disease Control
Diabetes
Highway Accident Prevention
Maternal Health
Occupational Health
Postgraduate Medical Education
Professional Insurance Plans
Public Health
Rural Medical Service
Scientific Radio and Television

The annual reports of the following committees, in the Handbook for Delegates, will not be considered by The Council until its September 25 meeting. If there are any comments or recommendations The Council wishes to make regarding these reports, they will be transmitted to the House in the verbal report of Council Chairman Hiscock.

Committees of The Council

Education Liaison
Evaluation of Prepaid Medical Services
Hospital Relations
International Health
Medical Aspects of Organized Athletics
Michigan Medical History
Relative Value Study
Liaison with Michigan State Pharmaceutical Association
Liaison with Residents, Interns and Medical Students
Liaison with State Board of Registration in Medicine
Liaison with State Executive Office

Committees of the Society

Aging
Cancer
Child Welfare
Governmental Medical Care Programs
Iodized Salt
Legal Affairs
Medical Socio-Economics
Medicine and Osteopathy
Mental Health
Public Relations
Respiratory Diseases
Venereal Diseases

PART III

Matters Referred To The Council By The 1965 House of Delegates

1. *Committee on Governmental Medical Care Programs.* In a substitute for Resolutions 1, 35 and 45, the House directed that the MSMS President appoint a Committee on Governmental Medical Care Programs, to "be concerned with the activities and planning of . . . governmental agencies involved in the medical care field".

This Committee, appointed by President Leader in December, 1965, has carried out its appropriate duties. (See Annual Report of Committee on Governmental Medical Care Plans.)

2. *Hiring of the Handicapped.* Resolution 4 directed that MSMS recommend to the Legislature that legislation be enacted to limit the employer's liability for pre-existing handicaps, by waiver or other means, to encourage hiring of the handicapped.

This resolution was referred by The Council to the Legal Affairs Committee for implementation. No suitable bill was introduced; a bill to create a Commission on Hiring of the Handicapped was supported but did not pass.

3. *Support of Voluntary Approach to Area-Wide Hospital Planning.* A substitute for Resolutions 5 and 16 expressed support for the voluntary approach to area-wide hospital planning, and urged formation of committees by component medical societies to initiate local and regional health planning councils.

The Council referred this resolution to MSMS representatives to the Hospital Research and Educational Reserve of Michigan and the Health Facilities Planning Council. It was communicated to component medical societies and MSMS members through *Medigram.*

4. *Principles for Federal Medical Programs.* Resolution 6 reaffirmed MSMS principles regarding medicine's relationship with government, and directed that The Council implement these principles.

The Council referred this resolution to the Committee on Governmental Medical Care Programs for implementation. The Committee, as well as individuals responsible for working with governmental agencies, has used these principles continuously as daily guidelines.

5. *Joint Committee to Study Training for Medical Assistants.* In Substitute Resolution 20, The Council was instructed to appoint a joint committee "consisting of members from medical societies, medical schools, and the State Board of Education, to consider areas of training, qualifications, and degrees of limitations, and control of medical ancillary personnel, and to investigate and consider the feasibility of developing and implementing a program of training at the college level as medical assistants under medical school supervision". The resolution further directed that AMA be notified of this action and urged to take similar appropriate action on a national level.

The Council referred this resolution to the Education Liaison Committee with the request that it meet with the State Board of Education for this purpose. The Education Liaison Committee studied the resolution and recommended that The Council appoint a special Subcommittee on Education for Medical and Paramedical Personnel. The Subcommittee was appointed with H. J. Meier, MD, Coldwater, as Chairman. The Subcommittee has met and conferred with leaders of the State Board of Education's Committee on Education for Health Care and the Michigan Health Council. Materials have been obtained from state and national medical organizations and from several medical schools. Development of criteria, etc., is moving forward under the direction of the parent Education Liaison Committee and its new subcommittee.

6. *Feasibility of Uniformity in Fee Schedules.* Resolution 25 directed The Council to promptly take action to review existing fee schedules and to consider the feasibility of establishing uniformity in payments of all branches of government.

The Council referred this resolution to the Committee on Uniform Fee Schedule for Governmental Welfare Agencies, which recommended that The Council, at appropriate times, request all governmental agencies to adopt the 1965 Michigan Relative Value Study with a $5.00 conversion factor as the basis of paying for physician services. The Council, having already adopted a similar proposal of the House of Delegates Committee to Determine Monetary Value Unit of the Relative Value Scale, agreed with this recommendation.

7. *Change of MSMS Annual Meeting Date.* Resolution 29 referred this matter to "an appropriate committee of The Council for study."

The Council has obtained information about future meeting dates of the various groups that meet annually in September and October. The Council adopted the recommendation of the Publication Committee that whenever feasible the MSMS Annual Session be held during the last week in September or the first week in October to permit component societies to meet prior to the meeting of the House of Delegates.

See Recommendation 6, Part IV.

8. *Preparation of RVS for Professional Pathology Services.* Resolution 31 directed that an appropriate committee prepare a Relative Value Scale for the professional component of pathology services.

Discussion between this Committee and officers of the Michigan Society of Pathologists led to the conclusion that at the present time a pathology schedule separating professional fees from cost or overhead factors is not practical. The RVS Committee asked that, should further study by the national societies in this specialty lead to a change in this position, further discussion be held by representatives of the Michigan Society of Pathologists and the RVS Committee.

9. *Modernization of Michigan Medical Practice Laws.* Resolution 32, which directed that The Council, with the help of other appropriate MSMS committees, prepare a bill for presentation to the Legislature embodying necessary changes for the modernization of the Michigan medical practice laws, was referred to The Council "for implementation at the time which, in its judgment, is most suitable to attain the greatest good."

The Council referred this resolution to the Legal Affairs Committee. A subgroup of the Board of Registration has been working on this problem and has agreed to review its findings with the Legal Affairs Committee before actually introducing any bill.

10. *Laboratory Medicine.* Resolution 37 stated that operation of a medical laboratory represents the practice of medicine and that a medical laboratory should be supervised and directed by a licensed physician. This resolution was referred to the Legal Affairs Committee through The Council for implementation and presentation to the Michigan Legislature.

A bill was introduced, was opposed by the State Health Department, and rejected by the Legislature. The effort resulted in agreement to carry out a mutual attempt to develop a suitable bill for next year.

11. *Preparation of RVS to Cover Professional Services for Diagnostic Radiology.* Resolution 39 directed that the Relative Value Study Committee produce a Relative Value Scale for Professional Services Only for Diagnostic Radiology.

The RVS Committee, in consultation with the Detroit Roentgen Ray and Radium Society, has been successful in formulating a separate relative value scale for professional services in the Diagnostic Radiology Section of the 1965 Michigan RVS.

The final report of the Committee, which will contain this matter plus other suggested modifications of the 1965 Michigan RVS, will be presented to The Council in September immediately preceding the meeting of the House of Delegates.

12. *Statute for "Implied Consent" Provision in Granting Motor Vehicle Drivers' Licenses.* Resolution 41, encouraging enactment of statutes providing for mandatory determination of blood alcohol, or the use of approved breathing tests, on drivers suspected of driving while intoxicated, and protecting doctors who perform such tests from subsequent court action, was referred to The Council "for implementation at the most opportune time", since the referrence committee believed there was a legislative bill being prepared which encompassed the intent of the resolution.

The Council referred this resolution to the Legal Affairs Committee, which held to the spirit of this resolution and, when asked, expressed no opposition to implied consent. This, however, has been the basis for a strong partisan-type legislative battle, which could have jeopardized other legislative effort. The result is still in doubt until final conference reports are dealt with.

13. *Automobile Safety Design Research Committee.* In Resolution 46 The Council was directed to appoint such a committee to "solicit the management of the automotive industry in Michigan to furnish appropriate engineering talent to further research advanced safety features in car design."

The Council Chairman appointed an ad hoc committee to meet with medical directors in the automotive industry to explore possible approaches to the implementation of this resolution. Plans are now being developed for its implementation.

14. *Committee to Evaluate and Set Up Preceptorship in Family Practice.* Resolution 50 directed The Council to appoint a committee to evaluate and set up a preceptorship in family practice, and to consider other methods for stimulating, interesting and training more young physicians in general and rural practice in Michigan.

The Council referred this resolution to the Education Liaison Committee. The Committee obtained detailed information from the several medical schools which have general practice preceptorships. The Committee also conferred with the AMA which has a national-level conference committee with the American Academy of General Practice studying ways to obtain or produce more GPs. The Education Liaison Committee is continuing its study with the deans and is awaiting helpful recommendations from the national committee.

15. *Inclusion of MDPAC Voluntary Contribution Request in MSMS Dues Billing.* Resolution 53 requested The Council, after favorable interpretation by legal and tax counsel, to approve and implement the inclusion of billing for the voluntary, non-deductible contribution to the independent Michigan Doctor's Political Action Committee with the next annual dues statement.

Legal Counsel Dodd reported to The Council that inclusion of a request for AMPAC-MDPAC contributions as an integral part of the MSMS dues notice might jeopardize the tax status of MSMS. The Council then authorized that the MSMS dues billing envelope contain a separate AMPAC-MDPAC Voluntary Solicitation and that any additional cost to MSMS be defrayed by MDPAC. Such a Voluntary Solicitation form was included in the 1966 dues billing.

PART IV

Council Recommendations

Recommendation 1:

The Council recommends that the House of Delegates approve the principle that organized medicine should accept, upon request, leadership in the medical survey of hospitals (See Part I).

Recommendation 2:

The Council recommends 1) that MSMS not remunerate AMA Delegates beyond expenses, 2) that MSMS not remunerate Councilors beyond expenses and 3) that remuneration of component medical society officers be left to the discretion of the component societies. (See Part I).

Recommendation 3:

The Council recommends that the House adopt the definition of a specialist as approved by The Council. (See Part 1).

Recommendation 4:

The Council recommends that the House consider the need and advisability of printing the 1965 Michigan Relative Value Study (with 1966 revisions, listing unit values of procedures not converted into dollars) for distribution to all MSMS members. (See Part I.)

Recommendation 5:

The Council recommends that the House of Delegates authorize an appropriate committee to:

1) study current upward trend in claims in professional liability insurance;

2) review the causal factors;

3) study revisions in rates and eligibility;

4) investigate possible measures which might slow or reduce the claims increase;

5) study pre-trial and impartial expert plans such as that in operation in Pima County, Arizona;

6) report its recommendations to the 1967 House of Delegates together with constructive advice and suggestions designed to assist MSMS members in the handling of professional liability problems. (See Part I.)

Recommendation 6:

The Council recommends that, whenever feasible, the MSMS Annual Session be held during the last week of September or the first week of October to permit component societies to meet prior to the meeting of the House of Delegates. (See Part III.)

THE REFERENCE COMMITTEE on Ways and Means, Fred C. Brace, MD, Chairman, was referred the following item from the Annual Report of The Council:

"*Financial Assistance to Needy Physicians.* In 1965, the House adopted the following recommendation of The Council contained in its annual report which resulted from a request for study by a previous House of Delegates: 'The Council recommends, with regard to needy physicians and their dependents, that although there is apparently no great number of physicians in Michigan who require aid, based on previous MSMS committee surveys, some state fund should be instituted to meet the need that does exist, financed through an increase in dues, and such a state fund should be administered on a matching basis with component medical societies.' The Council has forwarded this 1965 recommendation to the 1966 House Ways and Means Committee for consideration, and report to the House."

The Reference Committee recommended that "in view of the decreasing need for such a program, the advent of Social Security, Medicare, Old Age Assistance and the AMA Retirement Plan, the yearly need for such a fund is becoming much less. We feel that re-evaluation of the plan by this House is necessary. Therefore, your Reference Committee recommends no increase in dues to subsidize this fund."

THE HOUSE adopted the report of the Reference Committee.

THE REFERENCE COMMITTEE on Reports of The Council, Donald N. Sweeny, Jr., MD, Chairman, reviewed the Annual Report of The Council with the exception of items referred to other reference committees. The Reference Committee referred the report to the House for information only, commending The Council for the method in which the report was presented.

The Reference Committee commented upon the Council's six Recommendations as follows:

Recommendation No. 1 — Medical Hospital Survey.

"The recommendation of The Council that the House of Delegates approve the principle that organized medicine should accept, upon request, leadership in the medical survey of hospitals, has been considered by this House of Delegates earlier today when the activities of the Hospital Relations Committee were considered. No further action is necessary at this time on this recommendation."

Recommendation No. 2 — Remuneration of Officers.

"The 1965 House of Delegates received the recommendation of the 1965 Council that (1) MSMS not remunerate AMA delegates beyond expenses, (2) MSMS not remunerate Councilors beyond expenses, and (3) remuneration of component medical society officers be left to the discretion of component societies. The House recommended that The Council reconsider these proposals and, after review, The Council has reaffirmed the 1965 recommendation of the House of Delegates.

"Your Reference Committee recognizes that the time will come when the energies and activities of officers, delegates and representatives of the Michigan State Medical Society must be remunerated. At the present time, however, your Reference Committee accepts The Council's viewpoint and recommends reaffirmation in this regard."

Recommendation No. 3 — Definition of a Specialist.

"Your Reference Committee heard many arguments pro and con the necessity and even the urgency for this definition. Since this House of Delegates has this morning already taken action on the definition of a specialist, as embodied in amended Resolution No. 22, and since the definition provided by The Council in Recommendation No. 3, part 4, page 1 of its report is verbatim as presented in Resolution No. 22, no further action is necessary at this time."

Recommendation No. 4 — Publication of 1965-66 Relative Value Scale (With 1966 Revisions Listing Unit Values of Procedures Not Converted Into Dollars).

"Although this Reference Committee adheres to the concept that each physician has the right to establish his own fees based on his usual and customary practice, it feels that a document which represents official action of this House of Delegates should be published and distributed to the membership of MSMS. This RVS of 1965, with 1966 revisions, has been approved, and it therefore should be published and distributed to all MSMS members."

Recommendation No. 5 — Professional Liability Insurance.

"Your Reference Committee concurs with the recommendations of The Council . . ." and recommended the creation of a "House of Delegates committee of five members, designated by the Speaker, aided by Legal Counsel," to report in 1967.

Recommendation No. 6 — Annual Session.

"Your Reference Committee concurs with the recommendation of The Council that 'whenever feasible, the MSMS Annual Session be held during the last week of September or the first week of October to permit component societies to meet prior to the meeting of the House of Delegates.'"

COMMITTEE REPORTS

15. Annual Reports of Council Committees

COMMITTEE ON ALCOHOLISM AND DRUG ADDICTION

Richard C. Bates, MD, *Chairman*

During the past year, three meetings of the Committee were held: October 27 and December 15, 1965, and March 16, 1966.

The Committee did preliminary work on publishing a teaching guide on alcoholism for use by high school teachers. Since the Committee's planning, this project has been taken over by the Michigan Department of Public Health.

The Committee has continued its liaison with the State Board of Alcoholism which has been assigned to the Division of Medical Services, Michigan Department of Public Health; with representatives of the Michigan Mental Health Department on treatment of alcoholics in state hospitals; and with the Secretary of State regarding identification of the alcoholic driver.

With the assistance of the Michigan Department of Public Health, the pamphlet "Prescribing and Dispensing Narcotic Drugs — a Reference for the Health Practitioner" will be reprinted and sent to all MSMS members.

The past year has seen new facilities for the treatment of alcoholics at Kalamazoo and in the Upper Peninsula of Michigan.

The Committee reviewed all legislation concerned with alcoholism and drunken driving and its recommended actions were forwarded to The Council.

THE REFERENCE COMMITTEE on Reports of The Council, Donald N. Sweeny, Jr., MD, Chairman, recommended that this report be received for information.

THE HOUSE adopted the report of the Reference Committee.

COMMITTEE ON AWARDS

Wm. A. Hyland, MD, *Chairman*

During 1965-66, MSMS took advantage of the Centennial Session to present special awards of recognition. In addition, the usual annual awards were made.

The Centennial provided MSMS with the opportunity to show its deep appreciation and recognition of many firms, organizations and individuals. The names were recorded as part of the 1964-65 annual committee report.

Awards to National Presidents:

As in the past, MSMS presented its National Presidents' Award at the 1966 Officers Conference to the MSMS members who are serving as presidents of national medical organizations. They were:

William H. Beierwaltes, MD, Ann Arbor, Society of Nuclear Medicine;
Michael J. Brennan, MD, Detroit, American Society of Clinical Oncology;
John A. Cowan, MD, Lansing, Association of State and Territorial Chronic Disease Program Districts;
Arthur C. Curtis, MD, Ann Arbor, American Venereal Disease Association;
Winthrop N. Davey, MD, Ann Arbor, American Thoracic Society;
Reed O. Dingman, MD, Ann Arbor, Foundation of the American Society of Plastic and Reconstructive Surgery;
Jacques S. Gottlieb, MD, Detroit, American Board of Psychiatry and Neurology;
Jackson E. Livesay, MD, Flint, elected in February to head the American College of Radiology;
Kenneth R. Magee, MD, Ann Arbor, Society of Clinical Neurologists;
J. Robert Willson, MD, Ann Arbor, Association of Professors of Gynecology and Obstetrics.

50-year Awards:

The 1966 House of Delegates will recognize physicians who have served the science of medicine for 50 years or more. They are:

Ralph V. Allen, MD, Grand Rapids (Kent)
Karl A. Anderson, MD, Grand Rapids (Kent)
Effie Arnold, MD, Detroit (Wayne)
Harry J. Burkholder, MD, Alpena (Alpena)
Wesley M. Burling, MD, Grand Rapids (Kent)
Lona B. Carroll, MD, Detroit (Wayne)
Don A. Cohoe, MD, Detroit (Wayne)
Margarete Coleman, MD, Royal Oak (Wayne)
Schuyler O. Cotton, MD, Detroit (Wayne)
Charles R. Dengler, MD, Jackson (Jackson)
Frederick E. Dodds, MD, Flint (Genesee)
John C. Foshee, MD, Grand Rapids (Kent)
Owen C. Foster, MD, Detroit (Wayne)
L. D. Funk, MD, Athens (Calhoun)
Harry H. Goldberg, MD, Detroit (Wayne)
Winfred B. Harm, MD, Detroit (Wayne)
Joseph Heaslip, MD, Largo, Florida (Barry)
Harold Heffron, MD, Adrian (Lenawee)
Thomas J. Heldt, MD, Pleasant Ridge (Wayne)
Harold Henderson, MD, Southfield (Wayne)
Fred L. Honhart, MD, Grosse Pointe (Wayne)
Arthur Isaacson, MD, Detroit (Wayne)
Walter J. Jaracz, MD, Grand Rapids (Kent)
Hubert R. John, MD, Southfield (Wayne)
Wm. H. M. Johnson, MD, Detroit (Wayne)
Chas. E. Lemmon, MD, Detroit (Wayne)
Traian Leucutia, MD, Detroit (Wayne)
Charles T. Lewis, MD, Detroit (Wayne)
Edwin H. Lorentzen, MD, Detroit (Wayne)
Vincent S. Mancuso, MD, Ft. Lauderdale, Fla. (Wayne)
John J. Miller, MD, Marne (Kent)
O. W. Mitton, MD, Albuquerque, N. Mex. (Calhoun)
Arthur H. Naylor, MD, Milford (Wayne)
David P. Phillips, MD, Lansing (Ingham)
Ralph H. Pino, MD, Plymouth (Wayne)
Edgar R. Poos, MD, Detroit (Wayne)
Geo. G. Rieckhoff, MD, Detroit (Wayne)
Jacob R. Rupp, MD, Pontiac (Wayne)
Ara D. Sharp, MD, Albion (Calhoun)
Louis D. Stern, MD, Detroit (Wayne)
Wm. W. Stevenson, MD, Flint (Genesee)
Charles K. Stulik, MD, Union Pier (Berrien)
Bertrand C. Switzer, MD, Columbus, Ohio (Wayne)
Eugene Thornton, MD, Muskegon (Muskegon)
Chas. L. Tomsu, MD, Detroit (Wayne)
Wm. R. Vis, MD, Grand Rapids (Kent)
Jay D. Vyn, MD, Grand Rapids (Kent)
S. Merrill Wells, MD, Grand Rapids (Kent)
Herbert O. Westervelt, MD, Benton Harbor (Berrien)
Wm. Westrate, Sr., MD, Holland (Ottawa)

Special Awards:

A special award, authorized by The Council at its meeting in September, was given at the 1966 Officers Conference to C. Howard Ross, MD, Ann Arbor. The citation of appreciation recognized Dr. Ross' service for many years as chairman of the MSMS Committee on Courses on Medical Economics and Ethics. He declined reappointment for 1965-66.

A special award also was authorized by The Council in May, in appreciation to D. Bruce Wiley, MD, Utica, who resigned as secretary of MSMS. Dr. Wiley, who had served years as Secretary, formerly was a Councilor from Oakland-Macomb Councilor District for 10 years and formerly was Council Chairman. The award is to be made at the 1966 House of Delegates meeting.

THE REFERENCE COMMITTEE on Reports of The Council, Donald N. Sweeny, Jr., MD, Chairman, recommended that this report be received for information.

THE HOUSE adopted the report of the Reference Committee.

BEAUMONT MEMORIAL COMMITTEE

Robert J. Mason, MD, *Chairman*

Individual and collective activity has been directed toward maintaining liaison with the Island Park Commission and the Director of State Historical Projects.

The actual maintenance of the Beaumont Memorial building and the effective functioning of the display area is supervised by the Island Park Commission. The building is in good repair and the selected contents are effectively displayed and the Beaumont story is well told, all to the credit of MSMS.

A special feature in 1966 included a "loaned" display from the Beaumont Room of the University of Chicago. Mr. Rosenthal, curator of the University of Chicago Libraries, was a guest of the Society at the annual summer meeting.

Again an urgent request is made for all Michigan physicians to view and tell others of our Beaumont Memorial which reflects great credit on medicine in Michigan.

THE REFERENCE COMMITTEE on Reports of The Council, Donald N. Sweeny, Jr., MD, Chairman, recommended that this report be received for information.

THE HOUSE adopted the report of the Reference Committee.

COMMITTEE ON COURSES ON MEDICAL ECONOMICS AND ETHICS

Robert O. Kraft, MD, *Chairman*

We are terminating our lectures somewhat early this year, to permit onrushing graduating activities to find their place under the sun.

Much credit for the successful year is given to the tireless efforts of Willard Stawski, President of the Senior Medical Class, University of Michigan. The 12:30 P.M. noon hour has again been retained, yielding larger attendance, week by week.

Our aim still points toward Wayne State University School of Medicine, and we have hopes of possible joint sessions of the two senior classes.

SCHEDULE OF LECTURES PRESENTED BEFORE THE UNIVERSITY OF MICHIGAN SENIOR MEDICAL CLASSES:

"*A History of Ethics,*" C. Howard Ross, MD (June 30, 1965). Centuries pass in review. Heroes and principles are encompassed. Spoofing is occasionally permitted.

"*Development of a Fee Schedule,*" C. Howard Ross, MD (July 7, 1965). Values are established, varying with geography, dedication and professional involvement.

"*The Morality of Specialty Procedures, Medical and Surgical,*" Richard O. Kraft, MD (July 14, 1965). The dialogue ensues between diagnosis and procedures, with prognosis weighing the evidence.

"*The Doctor in Court,*" Judge James R. Breakey (July 21, 1965). Translating scientific terms to the jury brings the doctor down to earth, and his testimony rises in significance. Doctors Peet and Yoder are quoted as perfectionists in medical testimony.

"*An Ethical Approach to Geriatrics,*" C. Howard Ross, MD (August 4, 1965). 1000 new elders join our ranks every day of the year. Should the physician be detached or whole-hearted in his approach?

"*Internship Day with Michigan Hospitals,*" (August 11, 1965). Our Committee came to admire. Thirty hospitals sent representatives. Students thronged the booths. Drs. Towsley and Hubbard deserve all the credit.

"*Annual Meeting of our Committee at MSMS Headquarters, East Lansing,*" (August 18, 1965). The students held their bull session at Ann Arbor, then expounded before the doctors upstate. This was a most rewarding dinner session. Our plans were revised following many substantial suggestions.

"*The Implications of Medicare,*" F. P. Rhoades, MD (September 1, 1965). Will Big Government and paper work tonnage smother Medicine's Destiny?

"*Continuing Medical Education,*" Charles John Tupper, MD (September 8, 1965). The studious life continues to the last prescription written.

"*Portrait of an Intern,*" (September 15, 1965). Loan of film by Edward C. Rosenow, MD.

Michigan State Medical Society, Detroit, Michigan (September 22-23, 1965). Many of the class, especially the officers, attended the lecture given by W. D. Snively, Jr., MD.

"*Granny's Herbs and the Witch Doctor,*" C. Howard Ross, MD (October 6, 1965). 1638 and Cincona join the chorus of many nether contributions.

"*What is this New Movement of Medicine and Religion,*" (October 13, 1965). Dialogue by Winslow G. Fox, MD, and Chaplain Don Young.

"*Professional Management — The Business Side of Medicine,*" Tim Hogan (October 20, 1965). One graduates from the babes-in-the-woods status.

"*Duo vs. Singleton Practice,*" Tim Hogan (November 3, 1965). The patient is protected even when his doctor is out of town. Also, living is less tense in the physician's home.

"*The Sociological Aspects of Ethics,*" Wm. N. Hubbard, MD, George Morley, MD, C. Howard Ross, MD, Prof. Robert O. Blood, Jr., Sociologist (November 10, 1965, and January 5, 1966).

Subject Matter for Discussion:

a) "Race Explosion."

b) "Family Planning."

c) "Rhythm Technics Vs Diaphragm and Other Modalities."

d) "Therapeutic Abortion, Criminal Abortion."

e) "Artificial Insemination."

f) "Has the Decrease in the Incidence of Therapeutic Abortion Found its Origin in Science or Morality"?

g) "Catholic Hospital Codes, General Hospital Codes."

h) "Surgical Attacks on Organs of Procreation, Male and Female Sterilization."

i) "Removal of Diseased Organs Containing Embryo."

j) "Should a Catholic Resident in a General Hospital Dismiss Himself from an Operation that Specifically does not Meet His Code"?

k) "Doctor and Nurse Relationships in Patient Responsibility."

l) "Right to Die."

m) "Terminal Care."

"*The Doctors Accounting System,*" C. Howard Ross, MD (November 17, 1965). As the secretary raises the receiver, the processes unfold to the final accounting with Uncle Sam.

"*How to Land in Court in 10 Easy Lessons,*" Lester P. Dodd, Atty., MSMS (December 1, 1965). Voltaire speaks. Interest and questions follow the speaker to the door.

"*Orientation with the Specialties,*" GP Panel (December 8, 1965).

Moderator: Fred C. Brace, MD.
Consultation Techniques: Edgar C. Cochran, MD.
General Practice — The Keystone: Leon Rottenberg, MD.
Medical Organizations: E. C. Long, MD.
Summary: C. Howard Ross, MD.

"*Evangelism of Communication,*" C. Howard Ross, MD (January 12, 1966). When a telling message registers, some one in your audience will remember one item a year from hence — and maybe for a lifetime.

Medical Student Dinner at MSMS, East Lansing, (January 19, 1966). The fur flew and ideas were rampant, all constructive.

"*Public Relations and Medical Communications,*" R. Wallace Teed, MD, combined with Mr. Wills of MSMS (February 2, 1966). Many ideas were exchanged relating the doctor to the medium of life and practice.

"Medical Placement in Michigan," John Doherty and Robert Rice, MD, of the Michigan Health Council (February 9, 1966). How to match medical needs with medical manpower.

"Medical Education of the Future," Charles G. Child, MD (February 16, 1966). Dr. Child took the American Medical Writers' Association by storm and later most kindly gazed into the future for the benefit of the students.

"Is the Modern Physician Ashamed of Convalescent Care"? (March 2, 1966). A Symposium on the Modern Nursing Home.
Panel:

"Does Grandma have Her Rehabilitation Place under the Sun?" C. Howard Ross, MD.

"Extended Care Facility," Clarence C. Crook, MD.

"Washtenaw Medical Facility," Ralph L. Brandt, MD.

"The Modern Nursing Home," Lloyd Johnson of Whitehall Convalescent Homes, Inc.

We were fearful of flunking our lessons, but the audience was the largest of the year.

"The Doctor and his Home Community," Stuart Finch, MD (March 9, 1966). A most appealing tribute.

"The Frank Wilson Memorial Lecture," Fred Hodges, MD (March 16, 1966). Our group joined the Galen Society and the Faculty. We were thrilled with a first person recital of the "Wilson Days."

"The Medical Look Ahead," (March 23, 1966). The Crystal Ball of Prophecy. The time machine is dialed to "History in Reverse."

"What Fence do we Straddle in 1976?"
Moderator: Richard O. Kraft, MD.
Speaker: John R. G. Gosling, MD.
Rebuttal: C. Howard Ross, MD.

In the rush of things, we must not forget subjects of past years pushed aside and current suggestions not yet given birth. They include:

1. "24 ½ Years at the Helm," A. C. Furstenberg, MD.
2. "Economics and Ethics of Hospital Administration."
3. "Academic Medicine — Pros and Cons."
4. "A Doctor's Philosophy."
5. "Orientation Committee — Washtenaw Medical Society."
6. "The Veterans' Problem."
7. "Coordinating Home Care Programs."
8. "Observation Session in Circuit Court."

Contact has been made with Mr. Ralph F. Helzerman, Jr., President of the Senior Medical Class for next year. Our Committee will meet with his class for a general survey program on June 8, 1966, and first lecture to be scheduled June 15, 1966.

THE REFERENCE COMMITTEE on Reports of The Council, Donald N. Sweeny, Jr., MD, Chairman, commented on this report, "Your Reference Committee takes great pride in the activities of this Committee, which has presented an invaluable lecture series before the University of Michigan senior class. It wonders if these essays might be collected, edited and published for the use of others interested in the training of young physicians. We recommend that The Council investigate this possibility."

THE HOUSE adopted the report of the Reference Committee.

COMMITTEE ON DISASTER MEDICAL CARE

C. P. Anderson, MD, *Chairman*

At its meeting on November 10, 1965, members of the Committee discussed the need for education of physicians on how best to handle people in times of nuclear disaster. Thereafter, a meeting was held on February 10, 1966, to discuss "The Diagnosis and Treatment of Radiation Accidents." This session was sponsored by the Michigan State Medical Society, the Department of Postgraduate Medicine of the University of Michigan Medical Center, the Michigan Department of Public Health, and the Michigan Hospital Association. Hospital administrators in Michigan were also invited to this one-day refresher course.

The Committee's Chairman participated in the 16th National Conference on Disaster Medical Care, in Chicago. The Committee continues its activity for improvement of techniques and responsibilities for doctors of medicine and allied groups during major disasters within the State.

THE REFERENCE COMMITTEE on Reports of The Council, Donald N. Sweeny, Jr., MD, Chairman, recommended that this report be received for information and commented, "We appreciate this Committee's attention to the education of physicians on 'The Diagnosis and Treatment of Radiation Accidents.' We hope there will be no need to test this training in time of nuclear disaster."

THE HOUSE adopted the report of the Reference Committee.

EDUCATION LIAISON COMMITTEE

Don Marshall, MD, *Chairman*

The Education Liaison Committee, which met three times between 1961 and early 1964, has met five times in the past fifteen months. The Committee conferred three times during 1965-66: on January 5, April 13 and August 31, and also held an adhoc conference June 22, 1966, with leaders of the several state agencies and organizations now studying health manpower. Throughout the past year, the Committee studied reports from organizations with mutual concerns and read speeches made by national authorities on related subjects.

The work of the Education Liaison Committee during the past year can be divided into several subjects for review:

1. Further improvement of relationships and communications with the three medical schools in Michigan;
2. Extensive study and consideration of the 1965 House of Delegates Resolution No. 50 (referred by The Council to this Committee) regarding possible general practice preceptorships in Michigan;
3. Ambitious approaches to the proposal in 1965 House of Delegates Resolution No. 2 (referred also by The Council) to consider the development and use of "physician assistants;" and the appointment by The Council of a special sub-committee to explore all the ramifications;
4. Study of the progress in the formation of a Michigan Association for Regional Medical Programs, to implement federal Heart-Cancer-Stroke legislation;
5. Study of several recommendations, by other MSMS committees to The Council, as referred to this Committee for review and/or for information by The Council;
6. Consideration of plans by several community colleges to initiate new training programs for various helpers in the medical career field;
7. Development and continuation of MSMS relationships with the new State Board of Education Committee on Education for Health Care and its staff;
8. Coordination of MSMS interests with the Michigan Health Council and its request to the Kellogg Foundation to foster and assist the community colleges to train more health helpers.

1. *Re the Medical Schools*: The Committee is deeply appreciative of the keen interest of the three deans and their representatives in the work and potentialities of the Committee. These busy Michigan medical educators have been generous with their participation and observations on subjects of common concern. They have encouraged and inspired the Committee in pursuing several of its activities. Experienced MSMS leaders rate the present MSMS rapport and relationships with the three medical schools as being perhaps the "best ever."

A groundwork has been established for frank and productive study and consideration of current and predicted subjects of mutual challenges and opportunities.

2. *Resolution No. 50*: The MSMS Council referred this resolution, introduced by Fred C. Brace, MD, to this Committee for initial study and possible recommendations. The resolution asked The Council to appoint a special committee including medical school representatives "for the purpose of evaluating and setting up a preceptorship in family practice" and "to consider other methods for stimulating, interesting and training more young physicians in general and rural practice in Michigan." The Council felt it was desirable to refer this resolution to the Education Liaison Committee for a good, first look because the Committee is developing good working relationships with the three medical schools. The Council was cognizant that the deans face many demands for their time and that a new committee perhaps was not necessary at first.

The Committee quickly found that the question of "How can we get more GP's in Michigan?" was diverse with many, many ramifications.

The Committee in less than a year has:

A. Conferred several times about the preceptorship proposal with the three Michigan medical deans, who have not voiced opposition to the proposal but who have said other approaches should be explored.

B. Obtained and studied materials about their preceptorships from Kansas, Iowa and other state medical schools and medical societies. Fay Smith, MD, professor of general practice at the University of Nebraska, told the National Conference on Rural Health in Colorado Springs, March 18-19, 1966, about the success of their five-week, senior year general practice preceptorship program and he suggested the need for family practice teaching clinics, home service programs, and closed-circuit TV to expand continuing educational efforts. He urged new efforts to get two or more GP's in the smaller communities so each could attend PG courses and so each could enter community activities and enjoy his family.

The same national AMA conference heard Jesse D. Rising, MD, Chairman of the University of Kansas Preceptorship Committee, explain their senior year program, that began in 1951. In 1960, 1,000 alumni who had gone through the program were polled and 90 per cent of the 700 who responded indicated they were glad they had the preceptorship. Doctor Rising told the conference that, "It is our faculty's position that the preceptorship is particularly important for men who are definitely headed toward research and academic medicine because this will be their one opportunity to be physicians and to see where their research and teaching leads."

"Approximately 15% of the Kansas graduating classes now enter general practice following the internship year," reported Jack D. Walker, MD, Assistant Dean, in a letter to the Committee.

In addition to the MSMS Committee study of reports from other medical schools, the MSMS Committee has studied carefully the work of former and present national study committees. The work has close relationship to our Michigan study of the need for more general practice specialists.

Action by the AMA several times has affirmed and reaffirmed a conviction that family practice is important for optimum health care.

The medical profession has taken the leadership in many efforts. In some cases general practice preceptorships, internships and residencies have been established. In other cases family or comprehensive medical care programs have been established by some medical schools.

Because these actions have not reversed trends unfavorable to family or general practice, the AMA Council on Medical Education in 1964 appointed an Ad Hoc Committee on Preparation for Family Practice. The Ad Hoc Committee included representatives from the AMA Council on Medical Education, the Association of American Medical Colleges, the Academy of General Practice and the AMA Section on General Practice.

A progress report on the work of that Committee was made February 6, 1966, in Chicago at the AMA Congress on Medical Education. The report was given by William R. Willard, MD, Vice President for the University of Kentucky Medical Center, who is Chairman of the Ad Hoc Committee.

The Ad Hoc Committee, it was reported, is working on three broad purposes. They are:

"1. To review present AMA policy regarding the future of family or general practice and to determine whether the goals of such a policy are being achieved.

"2. To recommend the educational approach by which present goals may be achieved if they are not being achieved now.

"3. To define and recommend the policies by which these goals may be achieved."

The AMA Committee, agreed that more family practice doctors are needed, has suggested five premises that Doctor Willard outlined as valid for a program of family-practice education. The MSMS Committee has studied these in considerable detail and finds that they relate to the intent of Resolution No. 50.

These five suggestions of the AMA Committee are based upon educational principles and methods of established value. They are:

"1. The attitudes and philosophies of the medical school faculties should be constructive and supportive of family practice, especially the attitudes and philosophies of the chairmen of the major clinical departments. Students tend to identify with faculty members and to absorb the prevailing value systems which they exemplify.

"2. The program should have significant content in the behavioral sciences. The unique functional role envisioned for the family physician draws heavily from this field.

"3. Training programs for family practice should be conducted in an environment where research is fostered, research in both educational methods and in patient care, including research in the distribution of medical services.

"4. An adequate program requires an appropriate model of practice for demonstration purposes and for clinical teaching, a setting where students and house officers can participate in family practice as part of their educational experience. Example is more powerful as a teaching method than exhortation. Present programs of patient care in teaching institutions do not usually provide the necessary examples.

"5. Standards for family practice training programs must allow substantial freedom and flexibility in their content and organization."

The AMA Ad Hoc Committee contends that a total program is necessary and that little can be accomplished alone by a good medical school program or a good internship-residency program.

The Committee, Doctor Willard said, "believes that family practice should be considered as a specialty—characterized primarily by its function rather than by its subject-matter content."

As the MSMS Committee considers various ways to obtain more family practice doctors, reference should be made to another statement by the AMA Committee Chairman. Doctor Willard said, in part, "if the Ad Hoc Committee is correct in its tentative thinking about financing adequate training programs for the preparation of family physicians, substantial money will be required for developing adequate programs for faculty, for research, for training and for conducting appropriate patient care programs to serve as models of practice."

Doctor Willard, in his committee progress report seven months ago, discussed many other aspects of their study. Doctors interested in family practice may wish to obtain a copy of the speech from the AMA for detailed examination.

The MSMS Committee is eagerly awaiting the final report of the AMA Committee. The AMA Committee, aided by staff, is obtaining cooperation from the Association of American Medical Colleges, the Academy of General Practice and the AMA Section on General Practice.

In a short period of one year the MSMS Committee has done considerable study on the broad concern for more family practice doctors. The deans of the three medical schools have actively participated in the discussions.

The specific proposal of Resolution No. 50 to consider the feasibility of general practice preceptorships in Michigan has been studied in some depth. The preceptorship approach, the Committee believes, is only one part of a possible total program.

The MSMS Committee, on August 31, sent a recommendation to The Council "that The Council appoint a subcommittee of one or more representatives of (1) the Education Liaison Committee, (2) the three medical schools, (3) the MSMS Section on General Practice and the Michigan Academy of General Practice to consider the problems of general and rural practice and its relations to the medical school curricula." The August 31 Committee meeting (which included an officer of the Michigan Academy of General Practice as a guest) proposed that such a new committee should "explore further" the suggestions made in Resolution No. 50.

3. *Resolution No. 20:* The MSMS Council referred this resolution, introduced by William G. Birch, MD, to this Committee. The resolution called for a new, large committee "to consider areas of training, qualifications, and degrees of limitations, and control of medical ancillary personnel, and to investigate and consider the feasibility of developing and implementing a program of training at the college level as medical assistants under medical school supervision" and also that the AMA be urged to "take steps considered appropriate on a national level to develop similar programs of the non-physician provisions of health care." Such communication was sent to the AMA by MSMS.

This resolution was referred by The Council to the Education Liaison Committee for implementation — feeling the composition of the Education Liaison Committee was right for such a big task.

The Education Liaison Committee at its first 1965-66 meeting on January 5, 1966 agreed that it should move in six areas:

1. To take a sponsoring role in a study of the total needs for health manpower in Michigan.
2. To consider present and potential training programs of colleges and universities; and also community colleges.
3. To extend Committee study beyond consideration of a four-year course to train medical technologists with a possible new degree of bachelor of medicine, or bachelor of medical technology.
4. To be cognizant of the need for greater upward mobility in the paramedical vocations.
5. To recognize the need to involve in the paramedical fields the 7,000 students who apply annually to but are not accepted for medical schools.
6. To ask The Council to appoint a subcommittee to undertake this study. Three specific duties were outlined:
   A. To take steps to establish representation drawn from the appropriate schools, colleges, professional societies and groups, and legal, legislative and administrative agencies,
   B. To seek funds to aid in study and research,
   C. To take steps to establish the appropriate dissemination of information.

The Council on February 2, 1966, approved the recommendations of the Committee and appointed H. J. Meier, MD, former Chairman of The Council, as Chairman of this new Subcommittee on Medical and Paramedical Education.

The first joint meeting of the parent and Subcommittee was held on April 13. The two groups met again August 31.

The Subcommittee studied many reports and speeches. The problems of manpower usage and shortage have been researched by the National Commission on Community Health Services, which include AMA representatives. The NCCHS report to the President earlier this year, in part, stated:

> "Effective utilization of available health personnel will reduce the current manpower shortage, and continuous evaluation of use of manpower, accompanied by necessary changes and retraining, will provide additional manpower for existing and new health services. However, to provide comprehensive community health services in the next decade will require an unprecedented effort to recruit, educate, and train additional manpower for the health team. Such an effort should be intensive planned and continuous and should emphasize team work among all levels of health manpower."

The needs for maximum utilization of medical manpower and especially for more ancillary personnel for each physician are stressed by a NCCHS convention speaker, Marion B. Folsom, former HEW secretary, who in part explained:

"The need for greater womanpower and greater manpower in the field of medicine and health care has been rapidly expanding in recent years, due to the growth in population and the great advance in medical science and practice.

"This advance has been accompanied by more complicated processes and equipment, which require more and better trained personnel at all levels, and also by rapidly rising cost.

"Those in key positions in this field are faced with the extremely important task of recruiting, training and upgrading large numbers of people to provide high quality care. Because of the current short supply and the high costs, every effort must be made to obtain the maximum utilization of personnel."

Mr. Folsom continued:

"As is well known, there has been a great increase in the number of allied health workers in recent years to assist the physician. In 1900, for every 100 physicians there were 60 health professionals trained in other fields. By 1960, for every 100 physicians there were 370 other professionally trained health personnel. The ratio of physicians to total health services personnel was about one to ten. This enormous growth in specialized health-related personnel compensates for the relatively short supply of highly trained personnel. Not only do all these allied health workers save the time of the physician but many of these highly-trained health workers have a unique competence of their own in their specialty which may be superior to that of the physician or other professional."

The new MSMS Subcommittee has given considerable thought to who could give further assistance to the doctor of medicine. The possibilities of training and using a new-type health person — such as a physician's assistant — has been studied in great detail.

Subcommittee Chairman Meier presented a three-page document on April 27 to the two Committees, suggesting the method of study for his Subcommittee.

Doctor Meier urged that, first, a conference be called by MSMS for representatives of the several groups also studying Michigan's medical manpower needs. Such a conference was held at the MSMS headquarters, July 22. Groups present included MSMS, the Michigan Health Council, the Michigan State Board of Education's Committee on Education for Health Care, and a special Michigan State University task force requested by the State Department of Education to study training programs for future teachers for new junior college health career courses, etc. All representatives offered to share findings and to cooperate. No duplications of effort were found.

At its meeting August 31, the Education Liaison Committee and its Subcommittee spent some time focusing on the possible role of a physician's assistant. Many aspects of the approach were discussed such as: How to define limits of their work? How will medicine be practiced 25 years from now? How can we better use the many categories of present health workers? Should we develop a new person now to stopgap any shortages? How can we upgrade those now in health fields? How can we get more hospitals to provide care for more patients? Would a nurse with extra training meet the need? To produce more medical helpers, should one or two year training be provided rather than four year training? How can we encourage more young men in health vocations? How can we interest the school boards to train more technicians? What would be the compensation for a person with four years of college? How can we determine what medical specialists might use such helpers?

After the discussion of the many unanswered questions, the Committee studied again the April 27 letter from Chairman Meier to his Subcommittee. His draft of proposed Committee work suggested four phases. The first phase would be a feasibility study; the second phase, an attempt to develop the role of such an assistant; the third, consideration of the training program that would be required; and fourth, the ramifications of registration, etc.

Committee members agreed that MSMS should conduct a feasibility study by surveying Michigan physicians to determine if they would use such a "physician assistant" and for what activities; and to explore also the possible reception by the public of such "physical assistants".

A recommendation was sent to The Council by the two committees "that The Council authorize the Subcommittee to conduct a feasibility study among MSMS members re the possible uses of a "physician's assistant," and further "to seek funds to aid the study and research as previously authorized by The Council February 2."

Because one part of Resolution 20 referred to AMA activity in paramedical education, the Committee was interested in the AMA House of Delegates action at its June meeting in Chicago.

The AMA Board of Trustees, in a report on medical manpower to the June AMA Convention, said, in part, that: "The demand for physicians and for those in the allied health professions and sciences is likely to increase far into the future because of increasing knowledge and sophistication of the public regarding the benefits that modern medical and related sciences now make available, our growing population, the growth of voluntary health insurance, the increasing public funds committed to the financing of health care, the diversion of many physicians from patient care to research, education, and administration, the need for physicians in the military establishment and many other factors.

"It is apparent that if the public is to be provided with the health care which it is now purchasing, or to which it is now receiving entitlement by P.L. 89-97 and other new laws, health manpower must be dramatically increased.

"Notwithstanding the record production of physicians, of which we can be proud, and of other numbers of those in the allied health professions and services, it is obvious that the pressure for health care will require an increasing number of physicians and others in the health care field. Demand is outstripping the supply."

The House of Delegates approved the report without dissent, and also approved the establishment of a special committee on manpower.

4. *Heart-Cancer-Stroke in Michigan*: Possible Michigan implementation of the new federal Heart-Cancer-Stroke legislation has been studied at each of the three Committee meetings. Committee members offered commentary as the three medical school deans decided that ideally there should be one applicant group for the region of Michigan rather than an application involving each medical school.

A new organization, Michigan Association for Regional Medical Programs, was formed this year with a representative of MSMS as one of the members of the Board of Directors. The Council designated Education Liaison Committee Chairman Don Marshall to the MARMP board. Mechanism has been developed for developing, screening and processing applications for grants. The MARMP leaders are dedicated to planning grants that will lead to Heart-Cancer-Stroke programs on the local level to aid practicing physicians.

In its brief experience with the Heart-Cancer-Stroke program, the Committee sees the need for a two-way channel of communications to (1) inform MSMS of progress of the H-C-S program in Michigan, and (2) inform the MSMS representative of the desire of MSMS members and committees regarding the H-C-S program. The many MSMS committees (Heart, Cancer, Rehabilitation, Aging, Diabetes, Postgraduate Education and others who have some interest) should be kept informed and should be able to express themselves to The Council and their MSMS representative.

5. *Referrals from other Committees:* Several matters considered by other MSMS committees have been reviewed or are under active study by the Education Liaison Committee.

6. *Community College Programs to Train Health Helpers:* Committee members strongly believe that the twenty-three community colleges in Michigan can and should train paramedical personnel. The Committee on January 5 commended the Lansing Community College for its plans with MSU to train inhalation therapists under the AMA guidelines. Several other proposed junior college programs in different fields are being studied now by the Committee.

7. *Relationships with State Board of Education Committee on Education of Health Care:* Previous mention of MSMS efforts in this area are found under No. 3. In addition to official committee-to-committee relationships, several working conferences have been held on several projects between state staff personnel and our MSMS staff members. The work of this state agency committee will be very important to the medical profession and medical care. Every effort to cooperate and coordinate activities is being made.

8. *Coordination with Michigan Health Council request to Kellogg Foundation*: The M.H.C. request for funds to help junior colleges move toward training more health helpers has been discussed at several committee meetings. The Committee is eager to offer assistance, guidance and encouragement.

—SUMMARY—

The work of the Education Liaison Committee during 1965-66 has been demanding and exacting but also exciting and encouraging.

Committee members have been loyal in attendance and conscientious in their home work. MSMS staff assistance has been thorough and valuable.

The opportunities to proceed with more consideration of Resolutions Nos. 20 and 50 and to deal with all the other related concerns are unlimited during the coming year.

The Education Liaison Committee is moving steadily forward to accept heavy responsibilities.

THE REFERENCE COMMITTEE on Reports of The Council, Donald N. Sweeny, Jr., MD, Chairman, commented on the report as follows:

"The Education Liaison Committee presents an ambitious, far-reaching, revolutionary approach for training 'physician assistants'. There is a need for increasing the numbers of those concerned with the health care of the American public. Nevertheless, and in spite of current shortages in manpower, your Reference Committee urges caution in the use of ancillary medical personnel without adequate control. Although there is an obvious need for such paramedical groups, we as a Reference Committee await with great interest 'the degrees of limitation and control' of such medical ancillary personnel stipulated in the substitute resolution adopted by this House of Delegates in 1965.

"The Education Liaison Committee has suggested the need for a two-way channel of communications to '(1) inform the Michigan State Medical Society of progress of the heart disease, cancer, stroke program in Michigan, and (2) inform the Michigan State Medical Society representative of the desire of Michigan State Medical Society members and committees regarding the heart disease, cancer, stroke program.' In this regard, the Reference Committee heartily concurs and urges continued vigilance on these and other matters involving possible intrusion of Government into medical matters."

THE HOUSE adopted the report of the Reference Committee.

COMMITTEE ON EVALUATION OF PREPAID MEDICAL SERVICES

B. C. Payne, MD, *Chairman*

The Committee on Evaluation of Prepaid Medical Services completed its work of developing a suggested methodology to assist hospital medical staffs in carrying out their responsibility for the evaluation of patient care under the Medicare Act (PL 89-97).

This methodology utilizing the prepared criteria approach for selected diagnoses was contained in the text of the "Hospitalization Utilization Review Manual" as prepared by the Committee and approved by The Council. The Council also authorized that the guideline criteria for various diagnoses established by panels of Michigan physicians, which accompanied the text, be forwarded to local levels for adaptation.

The Committee is pleased that this approach to measuring patient care and the effectiveness of hospital use has been found acceptable to the Joint Commission for Accreditation of Hospitals. It also qualifies for hospital certification under the Medicare Act by the Michigan Department of Public Health.

Copies of the Manual, including the Criteria, have been sent to hospitals throughout the state. Arrangements have also been made to make additional copies available to hospital utilization committees.

The Committee extends its deep appreciation to all those who helped bring this project to a successful conclusion, especially those physicians who served on the criteria development panels.

THE REFERENCE COMMITTEE on Reports of The Council, Donald N. Sweeny, Jr., MD, Chairman, submitted the following report:

"After analysis of the actions of the Committee on Evaluation of Prepaid Medical Services, The Council and the House of Delegates of 1965, your Reference Committee recommends the following:

(1) In the future, such far-reaching decisions, which actually alter medical practice, must not be made without adequate discussion and approval by the House of Delegates of the Michigan State Medical Society. No other committee or Council may assume this responsibility.

(2) Careful judgment must be exercised in the soliciting of funds for medical studies lest conflict of interest arise.

(3) Further reproduction and distribution of the Hospital Utilization Review Manual must be stopped at once.

(4) The approval given by The Council in the name of the Michigan State Medical Society for official publication of the Hospital Utilization Review Manual must be withdrawn. The present holders of this Manual should be notified of this action.

(5) The original concept of retrospective studies of frequency of use of any prepaid medical services as originally requested by this House of Delegates in 1964 in Resolution No. 22 should be revitalized. To aid in this, the Michigan State Medical Society should formulate guidelines rather than 'prospective diagnostic criteria'."

THE HOUSE adopted the report of the Reference Committee and also adopted a motion that "since the Utilization Committee was directed to make this report, and whether or not we feel that all parts of it are correct, a letter of commendation should go to the members of this Utilization Committee."

HOSPITAL RELATIONS COMMITTEE

R. V. Taylor, MD, *Chairman*

This Committee met on April 19, 1966. The Chairman described the major purpose of the meeting as being fulfillment of The Council's charge to the Committee to establish means and mechanisms by which MSMS could survey, when requested, quality of care in hospitals. The Committee, individually and through intensive discussion, reviewed the booklets "Guiding Principles for Physician-Hospital Relationships" and "Medical Staff Surveys," both published by the California Medical Association, plus reprints of an article from *California Medicine* explaining the role of the medical staff hospital utilization committee as seen by the California Medical Association.

The Committee recommended to The Council, approval of the following mechanism for survey of hospitals upon appropriate request:

1. That a permanent committee of the House of Delegates be established to determine and implement the mechanisms for medical staff surveys of hospitals in Michigan, based on the "Guiding Principles for Physician-Hospital Relationships," adopted by the American Medical Association and summarized by the California Medical Association;

2. That the mechanics of such surveys be basically oriented to the "Medical Staff Surveys" outlined by the California Medical Association, but modified as necessary to meet the needs of less populous areas existing in Michigan

3. That such a mechanism may well be regionalized in the same distribution as is the MSMS Judicial Commission;

4. That the functions of this survey committee be considered as supplementary to, and not in lieu of, the work of the Joint Commission on Accreditation of Hospitals; and

5. That the Michigan State Medical Society function through this survey committee to evaluate quality of patient care upon a proper request of any hospital or other appropriate authority.

The Committee also requested approval of The Council that the above recommendation, if approved, be referred to the Constitution and Bylaws Committee for implementation. The Council received and approved these two recommendations on May 18, 1966.

The Committee has also concerned itself with proper anesthesia practices in Michigan hospitals as a result of the receipt of a communication from the State Director of Public Health. After a full and complete discussion, it was the Committee's decision that a communication should be written to Doctor Heustis pointing out to him that, through the decision to survey hospitals upon request by the hospital or appropriate agency, the Michigan State Medical Society will be taking additional steps to ensure quality of all types of care in hospitals — including anesthesia.

The Committee reviewed a working draft of the proposed principles for "Reimbursement under Medicare for Services of Hospital-Based Physicians" and material from the Educational Council for Foreign Medical Graduates dealing with the establishment of "interim certificates."

THE REFERENCE COMMITTEE on Reports of The Council, Donald N. Sweeny, Jr., MD, Chairman, commented on this report as follows:

"The Hospital Relations Committee of The Council was charged to establish 'means and mechanisms by which the Michigan State Medical Society could survey, when requested, quality care in hospitals of Michigan.'

"Your Reference Committee reviewed the report from the Hospital Relations Committee and the pamphlets, 'Guiding Principles for Physician-Hospital Relationships' (AMA), 'Medical Staff Surveys' (California Medical Association), and a reprint of an article published in California Medicine explaining the role of such a committee. We concur with the recommendation of The Council that there be a mechanism established for medical staff survey of hospitals upon appropriate request.

"To this end we recommend:

"(1) That a permanent committee of the House of Delegates be appointed by the Speaker to implement a medical staff survey of hospitals in Michigan when such a survey is requested by the medical staff of that hospital, or the executive committee of the staff of that hospital;

"(2) That the mechanics of such a survey be based on 'Guiding Principles for Physician-Hospital Relationships' (AMA) and 'Medical Staff Surveys' (CMA) — it shall be regionalized in the same distribution as the Michigan State Medical Society Judicial Commission;

"(3) That the function of this survey be considered as supplementary to, and not in lieu of, the work of the Joint Commission on Accreditation of Hospitals; and

"(4) That this action be referred to the Constitution and Bylaws Committee for implementation."

THE HOUSE adopted the report of the Reference Committee.

COMMITTEE ON INTERNATIONAL HEALTH

Robert K. Nixon, MD, *Chairman*

In serving as a clearing house of information for Michigan physicians who wish to contribute their time and ability to any one of the evergrowing number of international health projects being now created in all parts of the world, the Committee has processed some 250 affirmative informational forms returned by Michigan physicians, indicating a willingness to serve on overseas medical operation at some future date.

All of these physicians have been notified of the various health organizations in which they may be interested. Likewise, the organizations have received the names and addresses of the interested physicians.

At the present time, the Committee is investigating the program along this line offered by the Physicians' Placement Service of the American Medical Association. As soon as information is received from the AMA, a study will be made by the Committee to see if the Michigan State Medical Society is duplicating any of the services already established by the AMA. If there is duplication of effort, the AMA has offered to make suggestions for the continuing work of the Committee.

THE REFERENCE COMMITTEE on Reports of The Council, Donald N. Sweeny, Jr., MD, Chairman, urged this Committee "to continue its study outlined in this preliminary report".

THE HOUSE adopted the report of the Reference Committee.

LIAISON COMMITTEE WITH MICHIGAN CRIPPLED CHILDREN COMMISSION

A. C. Stander, MD, *Chairman*

The only meeting of this Committee was held on November 18, 1965.

Mrs. Esther Weber and Mrs. Geraldine H. Noyes were introduced as new members of the Commission. Subsequently, intensive discussion took place on the reorganization of the executive branch of Michigan state government. Information was given that on November 15, 1965, the Crippled Children Commission was transferred to the new Department of Public Health as a "type 2" transfer, which means that the Commission now becomes an advisory group to the Director of Public Health, and the Commission's staff and functions are placed within the new Medical Care Services Division of the principal Department. Members spoke of the impact of P.L. 89-97 (Medicare) on the Commission's program and an impending determination by the Governor of what major state agency should be designated administrator for the Title XIX program of P.L. 89-97.

The Committee discussed fees and stated that MCCC would strongly push for fee increases up to the full Uniform Fee Schedule, with further discussion being had on the meaning of "reasonable fees" under the new Federal legislation. The Committee expressed its concern for the maintenance of quality care.

The transfer of this Commission to the Department of Social Services, due to implementation of Title XIX, was introduced into the State Legislature by way of a resolution. This proposal did not pass, and the Michigan Crippled Children Commission will remain with the Department of Public Health. It has been ascertained, however, that an effort will be made to work out an arrangement between the Michigan Crippled Children Commission and the Afflicted Children program to utilize resources under the present administrative setting.

THE REFERENCE COMMITTEE on Reports of The Council, Donald N. Sweeny, Jr., MD, Chairman, commented on the report, "We are pleased that the Michigan Crippled Children Commission remains under the jurisdiction of the Michigan Department of Public Health and that application has been forwarded for proper fee schedules interpreted in the light of usual and customary levels."

THE HOUSE adopted the report of the Reference Committee.

LIAISON COMMITTEE WITH MICHIGAN HOSPITAL SERVICE

Harold H. Hiscock, MD, *Chairman*

Representatives of The Council and the Michigan Hospital Service Board met on February 16 to discuss matters of mutual concern.

Regarding the Michigan Hospital Service Medical Advisory Committee, it was pointed out that this Committee is now composed of MD members and it might be in the best interests of all for Michigan Hospital Service to provide for some DO representation. The MHS representatives recommended appointing an osteopath in 1966 and another in 1967 so that the reconstituted committee in 1966-67 would be composed of 10 MDs and 2 DOs.

The Council concurred with the proposal, feeling that such action would be in accordance with the intent of the House of Delegates and with Council policy re cooperation with osteopaths.

The representatives also discussed hospital review committees, the Blue Cross philosophy on the desirability of review committees and encouragement of expansion of the existing practice by medical staffs for all patients.

The Council representatives explained the plan being developed by the MSMS Committee on Evaluation of Prepaid Medical Services; no action was taken on the discussion of this matter.

This Committee will meet as necessary as additional items requiring discussion are brought to the attention of the respective representatives.

THE REFERENCE COMMITTEE on Reports of The Council, Donald N. Sweeny, Jr., MD, Chairman, recommended that this report be received for information.

THE HOUSE adopted the report of the Reference Committee.

LIAISON COMMITTEE WITH MICHIGAN STATE PHARMACEUTICAL ASSOCIATION

Robert V. Daugharty, MD, *Chairman*

Two meetings of this Committee have been held since the last Annual Session of the House of Delegates.

Items productively discussed included amendments to the Michigan Dangerous Drug Act and the Michigan Narcotic Act, opposition to legislation sponsored by the Optometry Association that would permit optometrists to prescribe medication, and the Federal Medical Restraint of Trade Act, including the matter of physician ownership and dispensing of drugs and the pharmacists' prescribing.

The Committee reaffirmed its position that the name of the drug should not be on the prescription label unless specifically requested by the physician and further reaffirmed its position that the name of the pharmacy should not appear on prescription blanks.

The Committee also discussed implementation of Public Law 89-97 and pharmaceutical services under Title XIX. A review was made of the Poison Antidote Kit Program sponsored by MSPA, which received the endorsement of MSMS through a resolution adopted by the House of Delegates in September, 1965.

The Committee discussed in great depth codes of understanding between state pharmaceutical and medical organizations in New York, Texas and Iowa and also reviewed the Code of Understanding between the Michigan State Pharmaceutical Association and the Michigan Association of Osteopathic Physicians and Surgeons, Inc., approved in 1964. The code adopted in 1959 by the Iowa State Medical Association House of Delegates and the Iowa Pharmaceutical Association, as amended, was recommended to The Council of MSMS and the Executive Committee of MSPA.

The Council, at its meeting on July 15, 1966, adopted the following motion: "The proposed Michigan Physician-Pharmacist Code of Understanding, as approved by the Michigan State Pharmaceutical Association House of Delegates, (is) approved for submission and recommendation to the MSMS House of Delegates, *provided* that MSPA accepts the reinsertion of the language dealing with pharmacists' discussing therapeutic effects of prescriptions with patients."

The Council requested the following language be reinserted in the appropriate place on page 1 of the Code, as adopted by MSPA and forwarded to The Council:

The pharmacist should never discuss the therapeutic effects of prescriptions with a patient. When such questions arise, he should diplomatically suggest that the prescriber is the proper person with whom such matters should be discussed.

The Code, as adopted by The Council, including the reinserted sentence, is as follows:

The purpose of this Code of Understanding is to improve relations between doctors of medicine and pharmacists. Its provisions are intended as guides for physicians and pharmacists in their inter-related practices in the areas covered by it.

The Code of Understanding is not a pronouncement of law, but constitutes suggested rules of conduct for the members of these two health professions subject to the principles of ethics governing the members of the respective organizations and rules of law prescribed for their individual conduct.

This Code constitutes the recognition that doctors of medicine and pharmacists are interdependent upon one another in serving the patient. It is the hope of the parties who have participated in the development of this Code of Understanding that, by an improved and closer relationship between the professions of medicine and pharmacy, the public will be better served. This Code of Understanding shall be reviewed and renewed annually, or more often if necessary.

PHARMACIST —

The pharmacist should never diagnose or prescribe even at the insistence of the patient, but should refer those needing medical attention to a *physician* of the patient's choice.

The sale of proprietary products and home remedies that have been released by the Federal Food and Drug Administration for over-the-counter sale which the patient may request for self-medication shall not be considered counter prescribing by the pharmacist. In an emergency or preceding arrival of the physician, the pharmacist will render such first-aid treatment as is indicated by scientific knowledge and good judgment.

If there is any question in the pharmacist's mind regarding the ingredients of a prescription, possible error or safety of the drug, he should privately and tactfully consult the physician before making changes and never discuss it with, or in the presence of, the patient. There should be no substitution of ingredients by the pharmacist, and he should follow exactly the prescriber's directions in the *renewal* of a prescription. If no *renewal* instructions are contained on the original prescription, the pharmacist will not, and according to law cannot, *renew* such prescription without the authority of the prescriber. Such authority can be obtained orally.

The pharmacist should never discuss the therapeutic effects of prescriptions with a patient. When such questions arise, he should diplomatically suggest that the prescriber is the proper person with whom such matters should be discussed.

The pharmacist shall be responsible for providing a complete bank of drugs on which the physician may draw by prescription for the treatment of his patient and serve as a source of information to the physician on new drugs and their combinations in order that the patient may have advantage of the latest pharmaceutical developments.

PHYSICIAN —

According to the American Medical Association's Code of Ethics, "it is not unethical for a physician to prescribe or supply drugs, remedies, or appliances as long as there is no exploitation of the patient." The Michigan State Medical Society is cognizant of this provision in medical ethics, but believes drug dispensing by a physician should be discouraged if adequate pharmaceutical service is readily available. A physician is trained to diagnose and treat disease while a pharmacist is trained to compound prescriptions on the precise orders of a physician. The physician should recognize the specialized training of the pharmacist and utilize his services whenever it serves the best interest of the patient. Each of these professions should be respected and their areas of training and practice acknowledged to the fullest extent possible. The professions of medicine and pharmacy recognize that the right to choose one's physician or pharmacist has been the keystone upon which has been built the finest system of health care that the world has ever known. With this understanding the professions agree that any influence by any third party with such right of choice is unacceptable and will be opposed. The free choice of pharmacist should be permitted on the same basis as the free choice of physician.

The physician has a responsibility to make clear to the patient that, even though a specific drug may be expensive, it is the best therapeutic agent he feels can be administered in treating the condition of the patient. A physician should not advise a patient as to the exact price of a prescription, any more than a pharmacist should attempt to establish a fee for a physician's work.

The physician should cooperate with the pharmacist, first, by specifying the number of times a prescription is to be renewed and, second, by making himself available to the pharmacist to determine whether or not his original orders should be altered after the original number of renewals has been obtained.

The physician and the pharmacist should work together as a team in seeing that a patient is properly medicated. Through this teamwork a patient is properly served.

THE REFERENCE COMMITTEE on Reports of The Council, Donald N. Sweeny, Jr., MD, Chairman, made these comments about the report: "After careful thought, your Reference Committee feels that the proposed Code approved by The Council for submission to the House of Delegates at this time is not necessary. We recommend its disapproval, and further recommend the reaffirmation of the AMA's Code of Ethics in this regard, which in part states: 'It is not unethical for a physician to prescribe or supply drugs, remedies, or appliances as long as there is no exploitation of the patient.'"

THE HOUSE adopted the report of the Reference Committee.

LIAISON COMMITTEE WITH RESIDENTS, INTERNS AND MEDICAL STUDENTS

NORMAN D. HENDERSON, MD, *Chairman*

On September 21, 1965, during the Centennial celebration, a special conference and reception for students, residents and interns was held at Cobo Hall. W. D. Snively, Jr., MD, Executive Vice-President of Mead Johnson and Company of Evansville, Indiana, spoke on "Computer Approach to Diagnosis." The response of the students showed great interest in this important growing field in medicine.

Warren R. Mullen, MD, of Pentwater, the first president of the Student American Medical Association, was a special dinner guest. He was presented an award honoring his contribution as first S.A.M.A. president.

Another special guest was Mr. Russell F. Staudacher, Executive Director of S.A.M.A.

Since the Annual Session is being held in Grand Rapids, which is not convenient to either Wayne or Michigan medical schools, the Committee decided against holding a conference for students, residents and interns in 1966.

The Committee is pleased that The Council has made arrangements with S.A.M.A. chapters of Wayne and Michigan to send *Michigan Medicine* and *Medigram* to the S.A.M.A. leadership at these schools. The Committee feels that it will be most helpful for the future leaders of medicine in Michigan to be exposed to the concerns of organized medicine.

THE REFERENCE COMMITTEE on Reports of The Council, Donald N. Sweeny, Jr., MD, Chairman, recommended that this report be received for information.

THE HOUSE adopted the report of the Reference Committee.

LIAISON COMMITTEE WITH STATE BAR OF MICHIGAN

WM. M. LEFEVRE, MD, *Chairman*

Your Committee stood ready to confer with the State Bar of Michigan on any matters of mutual interest during the 1965-66 year. No matters were referred and no meetings held.

It is the opinion of the Chairman that this Committee should be continued even though it may be inactive much of the time.

THE REFERENCE COMMITTEE on Reports of The Council, Donald N. Sweeny, Jr., MD, Chairman, recommended that this report be received for information.

THE HOUSE adopted the report of the Reference Committee.

LIAISON COMMITTEE WITH STATE BOARD OF REGISTRATION IN MEDICINE

KENNETH H. JOHNSON, MD, *Chairman*

Although no formal meeting has been held during the past year with the State Board of Registration in Medicine, a close and continuous liaison between the Board and the Society results from the presence on The Council of four members of the ten-member Board.

Since the time of the 1965 Annual Session, a subcommittee of the Board has been engaged in an intensive and extensive review of both the Medical Practice Act and the administrative rules under which the Board operates. This review is being made with the aid of the Attorney General's office, and when it has been completed and recommendations formulated, these will then be the subject of analysis by this Liaison Committee, augmented by representatives of The Council and the Legal Affairs Committee, to determine on any legislative course which should be pursued.

It should be noted that members of the State Board of Registration in Medicine are appointed by the Governor of Michigan from a list of recommended nominees submitted by the Michigan State Medical Society. Five such appointments were made in the fourth quarter of 1965.

THE REFERENCE COMMITTEE on Reports of The Council, Donald N. Sweeny, Jr., MD, Chairman, commented on the report, "We note that this Committee has had no formal hearings although a subcommittee is engaged in helping to revise the Medical Practice Act. We urge continuance and await an early finalization of this revision."

THE HOUSE adopted the report of the Reference Committee.

LIAISON COMMITTEE WITH STATE EXECUTIVE OFFICE

KENNETH H. JOHNSON, MD, *Chairman*

This Liaison Committee is charged with supplying advice and counsel to the Governor and his staff regarding medical matters and other matters of concern to the Michigan State Medical Society. It is available to cooperate in any program aimed at improving health care for the people of Michigan.

A significant portion of the Committee's work involves the transmitting of Society recommendations to the Chief Executive for gubernatorial appointments to Michigan government boards and commissions. During the past twelve months a number of recommendations have been made resulting in appointments, including recommendations for the composition of advisory councils.

A special meeting was held with the Governor to discuss the developing mechanisms for Michigan implementation of Medicare and the appropriate role of the Michigan State Medical Society in furnishing professional counsel to this program's administrators. On another occasion, a detailed discussion with the Governor was held to express MSMS concern regarding absolute state franchising of hospitals and related facilities. On a third occasion, the Governor's staff was furnished with analyses of the chiropractic bill passed by the 1966 Legislature, leading to a veto of this dangerous proposal.

The activities of this Committee are always explained in full detail to The Council.

THE REFERENCE COMMITTEE on Reports of The Council, Donald N. Sweeny, Jr., MD, Chairman, commended this Committee "for maintaining a close relationship with the State Executive Office, the Governor and his staff, regarding medical matters and other matters of concern to the Michigan State Medical Society", and applauded the positive influence of this Committee in medicine's behalf.

THE HOUSE adopted the report of the Reference Committee.

COMMITTEE ON MEDICAL ASPECTS OF ORGANIZED ATHLETICS

JAMES S. FEURIG, MD, *Chairman*

This Committee was established upon the recommendation of the MSMS House of Delegates. It was organized during 1965-66, held three meetings and began its service to the public and the medical profession.

Materials from the AMA Committee on Medical Aspects of Organized Athletics were studied and help obtained during the year from the AMA department.

The Committee has identified several areas of concern. Two broad responsibilities have been accepted: to interpret the need for greater MD interest in the areas of sports and medicine to the component medical societies and to MSMS members; and to provide a program of continuing education in this area for physicians, coaches, trainers, school officials, parents and athletes.

Possible activities are being explored for (1) the component medical societies, (2) for organized school athletic prgrams, and (3) for physicians.

The logical first project was seen as an in-service postgraduate type conference for physicians. Such a "Conference on Medical Aspects of High School Sports" was sponsored June 2 at Ann Arbor with the excellent cooperation of the University of Michigan Department of Postgraduate Medicine. A total of 78 physicians (and several coaches) attended representing 28 different counties. Each member of the Committee participated on the program.

One of the segments of the Conference suggested how a component medical society could sponsor a local workshop or meeting for its coaches, trainers, and high school principals. Several such county conferences will be held at Saginaw, Greenville and other communities. The MSMS Committee will assist.

The 1967 Conference will be offered for both team physicians and coaches with topics of interest to both.

The Committee will participate with the MSMS Public Relations Committee in special educational activities during August and September to focus attention on the key role of the physician in high school sports.

The Committee, upon the request of The Council, is preparing a position statement about the medical aspects of organized athletics below the high school level. There are many ramifications in such a subject, and to date the AMA has offered no statements re pros and cons, etc.

Channels have been opened by the Committee to work closely with the Michigan High School Athletics Association. The Committee hopes to make MD speakers available to MHSAA for its two annual conferences at Marquette and Mt. Pleasant.

The Committee is gratified by the support of The Council and by the initial interest shown by component medical societies and many individual physicians. Many projects can be conducted and many concerns investigated. The Committee is enthusiastically looking forward to 1966-67.

THE REFERENCE COMMITTEE on Reports of The Council, Donald N. Sweeny, Jr., MD, Chairman, commented on the report as follows:

"This Committee should be commended for its service to organized sports. Its programs have already prevented, and will prevent in the future, avoidable injuries and improve the medical care of athletes in general."

THE HOUSE adopted the report of the Reference Committee.

MEDICARE COMMITTEE

B. M. Harris, MD, *Chairman*

In past years this Committee has negotiated the Medicare Contract-Fee Schedule with the Office for Dependents' Medical Care of the Surgeon-General, U.S. Army. Under this program, Michigan physicians are compensated for medical care rendered to dependents of Armed Forces personnel.

This year The Council referred this matter to the newly appointed Committee on Governmental Medical Care Programs which has the responsibility for fee schedules and all aspects of governmental medical care programs which involve the Michigan State Medical Society.

Since present indications are that there will be no future assignments for this Committee, we request that it be discontinued.

THE REFERENCE COMMITTEE on Reports of The Council, Donald N. Sweeny, Jr., MD, Chairman, commented on this report as follows:

"We acknowledge the past activities of this Committee and thank its members for good service to the medical profession. We concur in its request that its responsibility be transferred to the Committee on Governmental Medical Care Programs and that the Medicare Committee be discontinued."

THE HOUSE adopted the report of the Reference Committee.

COMMITTEE ON MEDICINE AND RELIGION

R. L. Rapport, MD, *Chairman*

The Committee continued to expand component society programs in medicine and religion throughout the state and to initiate new county committees so that now thirty-three counties have been organized. Members of the State Committee throughout the year have contributed their services as speakers or panelists for local county society meetings and have given direction to organizational problems when invited.

A workshop was held on Wednesday, April 13, 1966, attended by twenty-three physicians and clergymen in which the following topics were discussed: (1) Organization of County Committees, (2) Program Planning, (3) Types of Program, (4) Invitations and Publicity, (5) Materials, (6) Results, and (7) Future Planning.

The Committee feels that great progress has been made and is grateful to those members of the medical profession and the clergy who have participated.

THE REFERENCE COMMITTEE on Reports of The Council, Donald N. Sweeny, Jr., MD, Chairman, commented on this report, "We acknowledge the progress this Committee has made since its establishment only a few years ago, and urge its continuance."

THE HOUSE adopted the report of the Reference Committee.

COMMITTEE ON MICHIGAN MEDICAL HISTORY

J. R. G. Gosling, MD, *Chairman*

The Council recommended the appointment of this new Committee as an outgrowth of the MSMS Centennial.

The Centennial activities focused a new interest on medical history of Michigan. Research for the medical-history aspect of the MSMS Healthmobile also gave added impetus to the creation of an MSMS Committee on Michigan Medical History.

MSMS members keenly interested in Michigan medical history were appointed to the Committee.

The Chairman is surveying the Committee members to determine their interest in various possible activities. A Committee meeting is planned for late September.

THE REFERENCE COMMITTEE on Reports of The Council, Donald N. Sweeny, Jr., MD, Chairman, "received the report of this Committee and looks forward in the future to its publications."

THE HOUSE adopted the report of the Reference Committee.

COMMITTEE ON NURSING

Robert J. Mason, MD, *Chairman*

Activities of this energetic Committee have been directed to interpret new and emerging functions of the nursing profession as related to the field of medicine. We have tried to promote a better understanding of the R.N. and the M.D. in their team role of providing better medical care for the patient. The A.N.A. and the M.N.A. are making valiant efforts to upgrade their educational standards by new methods of nursing education procedures, and the Committee is trying to interpret these proposed changes for a better awareness on the part of both professions.

Hey Doc, let's have a "Be Kind To Nurses" month.

THE REFERENCE COMMITTEE on Reports of The Council, Donald N. Sweeny, Jr., MD, Chairman, commented on this report, "Your Reference Committee is pleased that this Committee . . . is staying abreast of the nursing profession in their efforts to upgrade their educational standards."

THE HOUSE adopted the report of the Reference Committee.

COMMITTEE ON REHABILITATION

Richard W. Pomeroy, MD, *Chairman*

1. *Directory of Michigan Medical Facilities for the Physically Handicapped.* The Committee wishes to call to the attention of all physicians the availability of this Directory of informative and helpful information. Copies may be obtained by writing to the MSMS headquarters.

Because no new information has been received, and because no corrections or additions had come to the attention of the Committee, it was decided to wait a year or two before making any revisions of the 1965 publication.

2. *Medicare.* The Committee thoroughly discussed the many changes, additional requirements for nurses, registered physical therapists, physical therapy aids, and other needs in connection with rehabilitation services resulting from the many programs coming under Medicare. Of special concern to the Committee was the tremendous shortage of physical therapists and how to solve this problem. It was felt that if nurses, nurse aides, practical nurses, and other persons taking care of patients could be made aware of the rehabilitation aspects in patient care, this would help to alleviate the shortage of trained personnel. The Committee feels that "practical nursing" of older people and the chronically ill is as valuable as "specialized training care." Therefore, a special study committee has been appointed to consider the possibility of publishing a pamphlet of information to be of value and assistance to all persons taking care of patients in hospitals, nursing homes, private homes, and in other facilities.

3. *State Regional Rehabilitation Program.* In considering the matter of the training of physical therapy aides and physical therapy assistants, the Committee adopted the following recommendation, which was approved by The Council:

"That, because the American Physical Therapy Association is in the process of making its own recommendations regarding training of Physical Therapy Aides and Physical Therapy Assistants (Restorative Therapists), and because this information will be available in the near future, the Michigan State Medical Society take no stand or action regarding this matter until after the recommendations of the APTA can be studied by the Committee on Rehabilitation."

4. *Providing Physiotherapy in Nursing Homes.* The providing of physiotherapy in nursing homes under Medicare, and the proper application of rehabilitation procedures in such settings, was discussed by the Committee. The following recommendation was adopted by the Committee and approved by The Council:

"That, in view of the situation of nursing homes providing physiotherapy services under the pressures of Medicare, The Council of MSMS consider a method whereby physical therapy is made a part of medical treatment and whereby the patient's physician is made the person directly responsible for ordering the degree and kind of physiotherapy that is given to a patient whether this patient is in a hospital, a nursing home, or in any other facility."

THE REFERENCE COMMITTEE on Reports of The Council, Donald N. Sweeny, Jr., MD, Chairman, commented on this report: "Your Reference Committee concurs in the recommendation of the Committee . . . that 'the patient's physician be made the person directly responsible for ordering the degree and kind of physiotherapy that is given to a patient whether this patient is in the hospital, a nursing home, or in any other facility.' We thank the Committee on Rehabilitation for its vigilance, and urge that it continue its activities."

THE HOUSE adopted the report of the Reference Committee.

RELATIVE VALUE STUDY COMMITTEE

A. J. Neerken, MD, *Chairman*

As instructed by The Council, the Relative Value Study Committee worked toward the preparation of a Relative Value Scale for the professional component of pathology services (Res. 31 of the 1965 House of Delegates) and the preparation of a Relative Value Scale for the Professional Services of Diagnostic Radiology (Res. 39 of the 1965 House of Delegates) in the 1965 Michigan Relative Value Study.

Discussion with officers of the Michigan Society of Pathologists led to the conclusion that at the present time a pathology schedule separating professional fees from cost or overhead factors is not practical. The RVS Committee asked that, should further study by the national societies in this specialty lead to a change in this position, further discussion be held by representatives of the Michigan Society of Pathologists and the RVS Committee.

The Committee, in consultation with representatives of the Detroit Roentgen Ray and Radium Society, was successful in formulating a separate RVS for professional services in the Diagnostic Radiology section of the 1965 Michigan Relative Value Study. This new scale with other minor corrections in the Medical Section is contained in the "1965 Michigan Relative Value Study (Revised 1966)."

RECOMMENDATIONS

The Committee recommends approval of the 1965 Michigan Relative Value Study (Revised 1966).

The Committee in its deliberations has concluded that the present Medical Section of the Michigan Relative Value Study needs extensive refinement as it is cumbersome and unwieldy in its present form, and for this reason recommends that next year's Relative Value Study Committee study and make the necessary refinements in the Medical Section of the Michigan Relative Value Study.

THE REFERENCE COMMITTEE on Medical Service and Prepayment Insurance, James B. Blodgett, MD, Chairman, amended the Recommendation of the report deleting the words "Medical Section of the" in the last sentence and recommended approval of the report as amended.

THE HOUSE adopted the report of the Reference Committee.

COMMITTEE ON RETIREMENT PLAN

Robert K. Whiteley, MD, *Chairman*

There were no matters that required the attention of the Committee this year. The Committee, however, has followed with interest the passage of the Keogh Act Amendments (H.R. 10) by the House of Representatives.

The fact that more Keogh plans have not been established to date is not attributable to a lack of interest. Rather, it is due to the limited benefits available under the law. At present, a self-employed individual who is a sole proprietor or owns more than 10% interest in a partnership may contribute annually on his own behalf, to a retirement plan established under the Keogh law, $2,500 or 10% of earned income, whichever is the lesser. Moreover, he is only entitled to deduct 50% of his allowable contribution, or a maximum of $1,250.

H.R. 10 seeks the repeal of the provision in the Self-Employed Individuals Tax Retirement Act of 1962 (the Keogh law), which limits the deduction to 50% of the amount (up to $2,500 or 10% of income, whichever is lesser) a self-employed individual may set aside for retirement purposes.

THE REFERENCE COMMITTEE on Reports of The Council, Donald N. Sweeny, Jr., MD, commented on this report: "Although no matters were referred to this Committee, we urge its continuance in order that it may serve as a clearing house for information on the subject of retirement and pension plans for physicians."

THE HOUSE adopted the report of the Reference Committee.

COMMITTEE ON UNIFORM FEE SCHEDULE FOR GOVERNMENTAL WELFARE AGENCIES

Wm. M. LeFevre, MD, *Chairman*

Resolution 25 of the 1965 House of Delegates. This resolution involving the review of existing fee schedules and the feasibility of establishing uniformity in payment of all branches of government was referred to this Committee by The Council for study and recommendation.

The Committee studied this matter and recommended that The Council, at appropriate times, request all governmental agencies to adopt the 1965 Michigan Relative Value Scale with a $5.00 conversion factor as the basis for compensating physicians for their services. The Council, having previously adopted a similar proposal of the House of Delegates Committee to Determine Monetary Value of Unit of Relative Value Scale, agreed with the recommendation.

Welfare Fee Schedule Survey. The Committee and its staff conducted a survey of all Michigan counties to ascertain what fee schedules were currently in use by various departments of social welfare to pay physicians for their services. The results of this survey were sent to all county medical societies to assist them in their local negotiations on the 1964 Michigan Uniform Fee Schedule for Governmental Welfare Agencies (red book).

THE REFERENCE COMMITTEE on Reports of The Council, Donald N. Sweeny, Jr., MD, Chairman, commented on this report: "Your Reference Committee recognized and thanks the Committee . . . for past work. In order that material in regard to all governmental programs be properly correlated, we recommend transfer of the functions of this Committee of The Council to the Committee on Governmental Medical Care Programs, and that the Committee on Uniform Fee Schedule for Governmental Welfare Agencies be discontinued."

THE HOUSE adopted the report of the Reference Committee.

COMMITTEE ON VETERANS AFFAIRS

William Bromme, MD, *Chairman*

This Committee has, among its functions, the mediation of complaints which arise in the operation of the Hometown Care Program for Service-Connected Veterans since this function was taken away from Michigan Medical Service by the Veterans Administration four years ago. In this period of time no problem has arisen, thanks to the excellent prior work of the preceding committees.

One matter has arisen this year which involves fees requested for an out-patient service provided a veteran but since this problem has not been put into documentary state by the Regional Office of Veterans Administration, a meeting of this Committee has not been called.

THE REFERENCE COMMITTEE on Reports of The Council, Donald N. Sweeny, Jr., MD, Chairman, recommended that this report be received for information.

THE HOUSE adopted the report of the Reference Committee.

COMMITTEE ON WORKMEN'S COMPENSATION

William Jend, Jr., MD, *Chairman*

The members of this Committee consulted with each other informally during the year. The principal efforts of this Committee were directed at implementing the extensive changes in workmen's compensation legislation passed by the 1965 Legislature.

This Committee still feels strongly that adoption of the following key factors would markedly improve the administration of workmen's compensation as it relates to the medical profession:

1) Creation of the Office of Medical Director in the Workmen's Compensation Department; 2) Appointment of a Medical Advisory Committee to assist the Director of the Department; 3) Increased emphasis on rehabilitation programs; and 4) Greater use of impartial medical authorities to resolve issues of medical fact or opinion.

Meetings were arranged with legislators most directly concerned with workmen's compensation and further educational efforts are being carried out. Further meetings are also planned with the new Director of the Workmen's Compensation Department.

THE REFERENCE COMMITTEE on Reports of The Council, Donald N. Sweeny, Jr., MD, Chairman, urged that the Committee "continue in its efforts to create an office of Medical Director in the Workmen's Compensation Department, and the appointment of a Medical Advisory Committee to assist the Director of the Department."

THE HOUSE adopted the report of the Reference Committee.

16. Annual Reports of Standing Committees

ADVISORY COMMITTEE TO MICHIGAN STATE MEDICAL ASSISTANTS SOCIETY

G. E. Millard, MD, *Chairman*

The Michigan State Medical Assistants Society has had an eventful year. In September of 1965 their Annual Convention was held at the Statler Hilton in Detroit. The attendance has shown a steady increase year by year.

A large contingent from Michigan attended the Ninth Annual American Association of Medical Assistants Convention at the Roosevelt Hotel in New York. Our Michigan Medical Assistants are prominent in the leadership of the National Society.

The County Officers and Committee Chairman Conference was held at the Holiday Inn in Kalamazoo, November 7th, and the attendance was a record for this event. April 24, 1966, the Ninth Educational Seminar was held at the Empire House in Bay City with an attendance of nearly 200 individuals. All of your Advisory Committee to this organization attended all of the functions of this Educational Seminar. An Upper Peninsula Seminar will be held July 16 and 17 in Sault Ste. Marie. The 1966 Annual Convention will be September 28th and 29th in Grand Rapids. In October, the Tenth AAMA Convention will be held at Chase Park Plaza Hotel in St. Louis, Missouri. The Chairman, who is also an advisor to the National Organization, will be in attendance. A large contingent of medical assistants will be present and Betty Lou Willey from Port Huron is the outstanding candidate for speaker of House of Delegates to the AAMA. Michigan has representation on the Board of Trustees of the AAMA. They are continuing to promote themselves politically at a national level and are doing so effectively.

The conduct of their meetings and the organization work that they do on a county, state and national level contribute greatly to the stature and the effectiveness of each of these ladies in her doctor employer's office. They are effective in telling the doctor's story to the people. A revision of the National Education and Certification Program is now in process and will lead to a change within two years in the state educational program.

This educational program is in two major divisions: The administrative section and the clinical section. Certification examinations have now been held in various parts of the country for four years. One of the areas of the national certification examination is the Highland Park Junior College in Detroit. Another is the Ferris Institute in Big Rapids. Education and organization of the medical assistant will assist in enabling her to close ranks with the registered nurse, the certified laboratory and X-ray technician and strengthen the position which in the past was a weak link in the medical team. With the continual development of medical programs, and the greater amount of detail that is necessary in the doctor's office, the encouragement and the assistance by the doctors of Michigan to these organizations is a must. The House of Delegates of the Michigan State Medical Society in full knowledge of these and many other facts passed a resolution for The Council of MSMS to appoint a "Committee on Education for Ancillary Groups."

It is our understanding that this committee has been appointed and your Committee wishes to commend The Council for taking such prompt action on this important matter.

Your Committee passed the following resolutions:

1. Whereas, the state and national organization has a certification and an educational program now in effect, and

Whereas, the educational program is being revised, therefore be it

RESOLVED: That the Michigan State Medical Society make a financial contribution to assist and further the educational and certification program of the Michigan State Medical Assistants Society.

2. Whereas, the Michigan State Medical Assistants Society has been allowed the assistance of staff member Mrs. Marjorie Karker, and

Whereas, she has been of inestimable value in helping to accomplish the work of the assistants, and

Whereas, they are now able to use the address of the Michigan State Medical Society, therefore be it

RESOLVED: That the Advisory Committee to the Michigan State Medical Assistants Society wishes to give its thanks to the doctors of Michigan for their assistance to the Medical Assistants.

The Chairman of this Committee wishes to give thanks to the other members of the Advisory Board for their excellent attendance record and for their genuine interest in the furtherance of this Society.

THE REFERENCE COMMITTEE on Reports of Standing Committees, H. C. Tellman, MD, Chairman, accepted the report and called attention to a request from the Michigan State Medical Assistants Society for funds to promote the educational and certification program of the Medical Assistants. Details of the implementation will be referred to The Council of MSMS. The Reference Committee commended the Medical Assistants for their energetic state program and their recognition on the national level.

THE HOUSE adopted the report of the Reference Committee.

ADVISORY COMMITTEE TO WOMAN'S AUXILIARY

R. H. Reitzel, MD, *Chairman*

Since there has been no matter of policy involved in the Auxiliary program for this year it was not deemed necessary to call a committee meeting.

The members of this committee have had numerous contracts with the Auxiliary officers and board members through the year and are very gratified with the amount and caliber of projects they have completed. We salute these conscientious and dedicated women.

THE REFERENCE COMMITTEE on Reports of Standing Committees, H. C. Tellman, MD, Chairman, accepted this report as printed and commended the Committee's activities in the past year.

THE HOUSE adopted the report of the Reference Committee.

COMMITTEE ON AGING

A. Hazen Price, MD, *Chairman*

Our Committee met in January and will meet again later this year. Several of our members have been active during the winter, cooperating with various community groups who have had projects for senior citizen organizations.

During May of this year, several members participated with the Food and Drug Administration in its program to alert older members of society to the hazards of medical quackery and food fads. These meetings have been held in several cities throughout the State before very receptive audiences.

The problems which Medicare will pose were discussed at our January meeting and several suggestions offered to obviate the many difficulties. One of the biggest concerns is the shortage of personnel in hospitals, a nursing home, homes for the aged and in home care plans. The need of in-service training programs was stressed and ways to implement the care of people who will make demands for care beyond the facilities available.

The new Institute of Gerontology, formed by the last Legislature, should have as one of its main concerns the training of people to provide the care needed, both in institutions and at home. Under the egis of this Institute, many new projects for the needs of the aging should be developed and funds may be forthcoming from the Older Americans Act passed by Congress and will be allocated by the Commission on Aging.

During the balance of the year, plans are being formulated for a better cooperation between nursing homes and physicians. In this way, standards will, of necessity, be improved so that more homes will be eligible for Medicare funds and patients will get better care.

THE REFERENCE COMMITTEE on Reports of Standing Committees, H. C. Tellman, MD, Chairman, accepted this report as printed.

THE HOUSE adopted the report of the Reference Committee.

COMMITTEE ON BLOOD BANKS

L. W. Walker, MD, *Chairman*

The Committee had no work referred to it during the past year and, therefore, no meetings were held.

Bill No. 2966 (Blood Warranty) died in committee. The Attorney General's opinion on this problem has been requested.

THE REFERENCE COMMITTEE on Reports of Standing Committees, H. C. Tellman, MD, Chairman, accepted the report as printed.

THE HOUSE adopted the report of the Reference Committee.

COMMITTEE ON CANCER

M. J. Brennan, MD, *Chairman*

The Committee held two meetings: November 10, 1965, and June 23, 1966.

1. *Distribution of Pamphlets by the Michigan Council on Smoking and Health.* The Committee on Cancer is grateful to the Michigan Council on Smoking and Health for continuing the distribution of material which had originally been done by the Michigan Cancer Coordinating Committee.

In discussing smoking and health, the members of the committee thought it very important that efforts be continued to try to change the smoking habits of adults and to prevent younger people from starting to smoke.

The following recommendation was made by the Committee and subsequently was approved by The Council: "That, inasmuch as health problems in connection with smoking and, in particular with the adolescent populace, need to be kept in mind constantly, the Michigan State Medical Society offers its help via supplying printed material, exhibits, films, speakers, etc., to all agencies concerned with smoking and health, such as the Michigan Council on Smoking and Health."

2. *President's Commission's Report on Heart Disease, Cancer and Stroke.* The Committee was brought up to date on the work of the Michigan Governor's Advisory Council on Heart Disease, Cancer and Stroke and the

newly formed non-profit corporation entitled Michigan Association for Regional Medical Programs, Inc. In regard to this subject, the Committee on Cancer approved two recommendations to The Council. The Council subsequently referred the Committee's recommendations to the MSMS Education Liaison Committee for study and recommendations. The recommendations read as follows:

"RECOMMENDATION ONE: That The Council take favorable action on the Committee's concern that emphasis be directed to patient care and to the improvement of facilities and the capabilities of physicians involved in cases coming under the Regional Medical Programs legislation and that regionalization plans be a bilateral consultation and agreement between the central institute or university and the involved community hospitals. The Committee further urges that regionalization, as proposed by the Michigan Association for Regional Medical Programs, Inc., be on a more functional basis insofar as community needs are concerned."

"RECOMMENDATION TWO: Inasmuch as the Committee on Cancer, and the Committee on Cardiac Disease are both involved in the President's Commission's report and actions, that The Council recommend that joint meetings of these two Committees be held just as soon as more information is available."

3. *County Cancer Demonstrations Programs.* It was reported to the Committee that the Michigan Cancer Coordinating Committee was sponsoring Cancer Demonstration Programs. It is the hope of the MCCC that Michigan county medical societies (outside the metropolitan area) would avail themselves of this excellent offer. The MCCC will arrange for and cover the expense of a speaker on any cancer subject, (with stress being placed on the subject of "Cervical Cancer and Its Treatment"). The Committee is concerned that an ideal state has not been reached in the cytological and clinical diagnosis and treatment of cancer of the cervix and that efforts must still be continued educationally to the profession, as well as laymen, to improve this present situation.

THE REFERENCE COMMITTEE on Reports of Standing Committees, H. C. Tellman, MD, Chairman, accepted this report and commented: "It is apparent . . . that the implementation of heart disease, cancer and stroke legislation will require more satisfactory means of communications between the various committees of MSMS and the representative of The Council who sits on the Michigan Association for Regional Medical Programs, Inc. The Reference Committee urges that The Council take steps to improve intercommunications."

THE HOUSE adopted the report of the Reference Committee.

COMMITTEE ON CARDIAC DISEASE

S. E. Chapin, MD, *Chairman*

The Committee held a meeting on April 27, 1966, and discussed the following:

Rheumatic Fever. The Committee recommended to the Michigan Heart Association that it continue financial support of the active Rheumatic Fever Centers, until other arrangements can be made, and that the present program be continued for the 1966 calendar year; and that the Michigan Heart Association renew its search for a Michigan Rheumatic Fever Coordinator. In compliance with the request of The MSMS Council, the Committee on Cardiac Disease will evaluate future need for such Centers in the light of new federal programs.

Reporting of Rheumatic Fever. The Committee, with the help of the Michigan Department of Public Health, will inform all physicians and hospitals in Michigan of the law requiring that rheumatic fever cases be reported.

President's Commission on Heart Disease, Cancer and Stroke. The Committee has recommended to The Council that every effort be made to see that MSMS is well represented on any and all planning committees resulting from the President's Commission's activities.

The Committee has continued its liaison with related groups and participated in the State Conference on Cardiovascular Disease.

The Committee has been informed regarding the Cardiac Evaluation Clinics in Michigan; the proposed Nutrition Survey by the Michigan Heart Association; and the matter of intensive care units in hospitals.

THE REFERENCE COMMITTEE on Reports of Standing Committees, H. C. Tellman, MD, Chairman, recommended acceptance of this report as printed.

THE HOUSE adopted the report of the Reference Committee.

COMMITTEE ON CHILD WELFARE

J. M. Dorsey, Jr., MD, *Chairman*

1. *Eye Screening.* The Committee has made plans to publish an article in the MSMS Medigram giving information regarding the procedures involved in eye screening and a description of equipment available and where such equipment could be obtained. The Committee feels that many physicians are not aware of the correct simple procedures involved in eye screening and that possibly they can do a better job with more knowledge and the proper equipment.

2. *Measles Immunization.* In view of the possibility of the introduction of compulsory legislation governing measles immunization, and the great interest and concern of the members of this Committee of the physical well-being of all children in Michigan, the Committee adopted a motion to request the Committee on Legal Affairs to review this matter with the thought in mind of writing a good law governing measles immunization that would be acceptable to the medical profession.

The Committee also approved in principle a Measles Immunization Program in the State of Michigan and endorsed the action already taken by The Council and the Committee on Legal Affairs.

3. *Government Programs.* The Committee discussed the many programs being offered by the federal government involving the health care of children and the lack of information and direction to physicians. Of special concern to the members of the Committee were two programs: "Project Head Start" — the federal government's crash program for culturally deprived children which was put into effect during the summer of 1965; and, the program in Detroit called "PRESCAD" — a program involving pre-schoolers, schoolers and adolescents.

The concern of the Committee members is that physicians are getting involved in such programs with little or no information being funneled to them about the program with no means of measuring their individual responsibility.

The Committee has been informed that the "Project Head Start Program" will be having a state coordinator and that the American Academy of Pediatrics is now working on a guideline for health supervision in children which it hopes to publish this year.

It is the recommendation of the Committee that each individual physician familiarize himself with each program to the best of his ability and that he insist on and give the highest type medical care in his individual association with each program in which he becomes involved.

If and when a state coordinator is appointed, the Committee on Child Welfare will offer its help and formulate a set of standards for giving examinations to children involved in the various governmental programs.

4. *Physician Communications with Local People on School Health Problems.* The Committee's pilot program in Oakland County is progressing and the Committee is hopeful of being able to solve some of the many problems involved in improving communication between educators and physicians and the great need for establishing some effective level of communication between these two groups.

The program will be expanded in the future to include osteopaths and educators representing the parochial students.

THE REFERENCE COMMITTEE on Reports of Standing Committees, H. C. Tellman, MD, Chairman, recommended acceptance of this report as printed.

THE HOUSE adopted the report of the Reference Committee.

COMMITTEE ON DIABETES

Wm. M. LeFevre, MD, *Chairman*

Your Committee presented the agreement between the various sponsors of the Michigan Diabetes Detection Program to The Council for approval. This approval was granted and the agreement signed.

The Committee represented the Michigan State Medical Society on the Michigan Diabetes Detection Program and aided in obtaining cooperation of county medical societies in this mass detection plan. The overall report of this program is made on a calendar basis since it often takes as much as six months for all screenees to be finally checked out by the family physicians.

During 1965, the program reports 128,521 persons tested for diabetes. This test was done on venous blood using the autoanalyzer method of analysis. All tests under 60mgm% were referred back to their family physician as possible hypoglycemics. All tests over 130mgm% were referred back as possible new diabetics. The family physician was advised to do glucose tolerance tests or any other procedure he found necessary on these patients unless he was sure the patient was a true diabetic.

Of the 128,521 persons, 5,403 were referred back as possible diabetics, 1,385 of these proved, after further investigation, to be true newly discovered diabetics and 9 others as hypoglycemics. The 1,385 new diabetics represents 1.08% of all the screenees tested. Another 588 were classed as potential diabetics and were so notified by their family physicians.

The Committee is well aware of the great benefits derived from this type of program and is anxious that the Michigan State Medical Society continue to lend its support to diabetes detection with the cooperation of the Michigan Diabetes Detection Program and its various sponsors.

THE REFERENCE COMMITTEE on Reports of Standing Committees, H. C. Tellman, MD, Chairman, recommended acceptance of the report as printed.

THE HOUSE adopted the report of the Reference Committee.

COMMITTEE ON GOVERNMENTAL MEDICAL CARE PROGRAMS

A. J. Neerken, MD, *Chairman*

This Committee was created during the 1965 session of the House of Delegates as a result of the enactment of the Social Security Amendments of 1965 (Public Law 89-97) — Medicare. The House of Delegates, in adopting Resolution 35, recognized the necessity of correlating the various programs at the county, state and national levels under one Committee and mandated the Committee as follows:

1. To keep abreast of current developments in governmental medical and health care,
2. To anticipate new governmental health measures proposed by or for government at any level,
3. To establish an effective liaison with governmental agencies' personnel for implementing health programs, and
4. To advise on MSMS posture in relation to governmental programs and their implementing regulations.

The initial meeting of this Committee was held on January 26, 1966, for the purpose of Committee organization and the establishment of priorities for Committee action. At this initial meeting, Albert E. Heustis, MD, Director of the Michigan Department of Public Health, discussed in detail the major segments of Public Law 89-97 with particular reference to expanded services for children and increased cash public assistance to Social Security recipients. A comprehensive discussion of other major portions of PL 89-97 was given.

It is important to point out that the first official recommendation of this Committee was to ask for an immediate audience with the Governor to discuss Medicare, with Title XIX as a special point of emphasis. The Committee also immediately recognized that, as soon as a fiscal agent was designated by HEW, the Committee's first and important subject of discussion would be negotiations with the fiscal intermediary regarding fees for physicians' services under Title XVIII(B) and the recognition of a need for negotiating a single, truly uniform method of payment based upon the usual and customary fees, applicable to all governmentally-sponsored medical care programs. The Committee also recommended that the Committee to Determine Monetary Value of Unit of Relative Value Scale, chaired by R. V. Taylor, MD, meet without delay to set the monetary factor on the RVS, with a recommendation that it be not less than $5 per unit and a recommendation for future review to reflect changes in the level of the economy.

Due to the continuing heavy responsibility this Committee will assume, the House of Delegates also authorized the hiring of a new staff member who will be responsible for MSMS activities of the entire Governmental Medical Care Programs area. Mr. Herbert Mehler was appointed to this position.

The Committee has had a number of meetings with representatives of Michigan Medical Service to work out an acceptable and reasonable formula for payment of physicians' services under Public Law 89-97.

Following these several meetings, a proposal for payment of physicians' services was submitted by Michigan Medical Service, the carrier to the Social Security Administration. Since Medicare eliminates use of a fixed fee schedule and patient's income as direct factors in establishing payment levels, physicians are asked to submit their usual and customary fees for services rendered. The Medicare law requires the fiscal agent to demonstrate that the fees paid under the program are "reasonable." Several parameters will be used to make such a determination, including the customary charge in the locality, the charge the physician most frequently makes to his other patients for similar services, and the 1965 Michigan Relative Value Study. The text of the payment program for services under Part B of Title XVIII of Public Law 89-97, as sent to the Social Security Administration by Michigan Medical Service, follows:

PAYMENT PROGRAM FOR SERVICES COVERED UNDER PART "B" OF TITLE XVIII OF PUBLIC LAW 89-97 (MEDICARE)

Michigan Medical Service (Blue Shield)
June 1966

Preamble:

One of the principal functions of the Medicare Part "B" carrier is to determine reasonable charges of physicians for services rendered to Part "B" recipients. The proposal outlined below is submitted with the understanding that the ultimate system, as suggested in the various draft regulations, instructions and other commentaries by Social Security officials, is not practically possible by July 1 of this year.

The administrative impossibility of such implementation is caused by the fact that the information necessary to develop individual physician charge profiles is not now available, nor can it be acquired in any meaningfully sound bases until the actual program is in operation.

The payment mechanism, which is apparently required under the law, is substantially different from any arrangements used currently or historically by Michigan Medical Service.

These practical aspects of the situation notwithstanding, obviously a viable program is necessary and the following is submitted as a suggested program.

Michigan Medical Service Current Programs:

Michigan Medical Service currently pays for subscriber benefits through a program designed to provide service benefits, i.e., full physician payment within a covered benefit scope. However, its current programs have no application under Medicare because:

1) payment is made under fixed surgical schedules;
2) physician agreements limiting charges are predicated on subscriber income;
3) except in rare instances, no benefits are paid for home or office medical care.

Consultations with Social Security Administration officials, especially in connection with references 1 and 2 above, clearly indicate that income factors and fixed schedules cannot be considerations in establishing a level of reasonable charges under Medicare.

It should also be pointed out that Michigan Blue Shield's primary contract — the so-called M-75 Plan — makes payments under a series of schedules, each dependent on a different level of income. At no time in the course of its operation has Blue Shield attempted to recognize any actual or imagined differences in physician charges by "locality." While some information exists to suggest that such a variation might be characteristic of physician charges — at least with respect to home and office care — it is too antiquated to be credible.

Blue Shield Management has had a series of meetings with appropriate officials of the Michigan State Medical Society on the various aspects of Medicare implementation. In the course of these discussions, one suggestion of SSA draft regulations, i.e., that physicians be surveyed before July 1, 1966 to ascertain reasonable charges, was deemed impractical and unsatisfactory, for a number of reasons:

1) No such survey could be constructed on a meaningful basis, because of the exogenous disturbance caused by the concerns and uneasiness existing currently among medical practitioners which, in turn, would produce the "anticipatory bias" referred to in various SSA documents. Such negative factors would have been an element at any time in the past 3 or 4 months.

2) The fact that, in the judgment of Blue Shield staff, such a survey would not provide information of sufficient value to offset the survey's negative ramifications.

3) The survey would result in inequitable administration because of the strong possibility that questionnaires would not be completed by a substantial number of physicians, with the result that claims submitted by the cooperating physicians, who did complete the forms, would be subject to a more precise review than the claims submitted by those who did not return the questionnaires.

4) The fact that the Michigan State Medical Society had just completed revising the Michigan Relative Value Scale which, as much as any other currently available mechanism, reflects the current pattern of physician charges in the State of Michigan, at least without income considerations.

Interim Program:

It is Blue Shield Management's opinion that the only practical solution, a solution in the main supported by the attitudes of the State Society, is that in the initial stages, the Michigan Relative Value Scale, at $5.00 a unit, as developed in September, 1965, would be a major guideline against which claims submissions would be measured.

The MRVS was initiated in 1961, and then reviewed and revised in 1965. It expresses, as nearly as it is possible to do so, the consensus of the physicians in Michigan as to what constitutes reasonable charge levels for the total spectrum of physician services. Since the State Society had previously indicated that such a program constituted an appropriate payment level, it would seem that using such a scale as a major parameter against which to measure claims submissions would both gain the support of the large number of physicians in the state, as well as provide a reasonable restraining influence on program costs.

The attached outline (Exhibit I) suggests that until such time as payments under the program provide sufficient data to build the necessary physician profiles, extraordinary sampling and review techniques will be used to verify both that the claims submissions do, in fact, represent charges most commonly made by physicians to all their subscribers, and that they are also within the range of charges prevailing in the community.

Ultimate Program:

It is assumed that by January, 1967, a program involving the extensive use of individual physician profiles will be operational. It is hoped that such a program can be initiated in the second quarter of operations, but only the flow of claim submissions will dictate whether such an early implementation is possible. The attached description of that system (Exhibit II) indicates the techniques to be used at that point.

Summary:

It would seem the interim and ultimate programs being proposed by Michigan Medical Service are consistent with the SSA objective that each carrier develop a program of paying physicians which is viable and equitable.

There is a strong possibility that physician charges for Medicare recipients will be higher under Medicare than the charges for services to such patients has been in the past.

Some such adjustment should not only be expected but must be considered valid. In Michigan, more than 300,000 persons over 65 have had protection under Blue Shield, and most of those under the low income ceiling program, the payment levels of which are considerably substandard. In addition, some 125,000 others received medical care under various state and county welfare programs — which also have payment levels substantially below normal levels.

Recognizing the probable inevitability of such a valid escalation of costs, Michigan Medical Service submits its proposal with the belief that the predominant attitude among physicians in the State of Michigan will be one of restraint and prudence. With respect to charge levels, it is felt that the proposed technique is practical and within the framework of the law and SSA regulations and instructions.

It is also felt that any eventual comparison which might be made between Michigan and other areas of the country would show, both under the interim and ultimate programs, that such an approach has proven to be sound and effective.

As indicated in the original proposal submitted to the Secretary last year, Michigan Medical Service has both a long history of experience of sound administration in the field of medical economics, and a cooperative relationship with the medical profession in its area of operation. This history suggests that the best interests of all involved will be served without a detrimental effect to any of the interests involved — physicians, Medicare recipients, or those with responsibilities for administration.

Of necessity, this proposal concentrates its attention in the main area of reimbursement for services rendered by physicians. In addition, however, certain efforts needed to agglomerate data for payment for other services, such as prosthetic and similar devices, is also in process.

EXHIBIT I

INTERIM METHOD OF PHYSICIAN REIMBURSEMENT:

The system to be used in the early months of the Medicare program will use the Michigan Relative Value Scale (MRVS) with a value of five dollars ($5.00) per unit as the test for reasonableness of charges. The physician's charge in each incoming case will be compared to the MRVS fee for the reported procedure.

1. *The physician's charge is equal to or less than the MRVS fee.*

a) The physician's charge will be paid, with the exception of a control sample.

b) A statistical sample of cases will be subjected to a further scrutiny prior to payment. In these cases, a form will be sent to the reporting physician asking if this is his usual charge. If the reply confirms the customary nature of his charge, the case will be paid.

c) If the reply indicates that the charge is higher than his customary charge, the case will be reviewed by MMS to determine whether unusual services warrant the higher fee. If this is the case, the charge will be paid.

d) If not, the physician will be paid his customary charge being advised he has recourse through the local review committee.

2. *The physician's charge is higher than the MRVS fee.*

a) Each case will be reviewed by MMS to determine whether unusual services warrant the higher fee. If this is the case, the charge will be paid.

b) If the services are not unusual in nature, a form will be sent to the doctor inquiring about his charge for this service, pointing out that it is above the MRVS fee, and advising him consideration of payment above the MRVS will have to be submitted to the local review committee for further consideration.

c) If the physician indicates he does not desire further consideration, he will be paid the MRVS fee.

d) If the doctor responds that the charge on his bill is his customary charge and desires further consideration, the case will be referred to a local review committee for consultation to determine whether the charge is no higher than the prevailing fee by physicians of similar training and experience in the community.

e) If there is agreement that the doctor's charge does not exceed the prevailing fee in his community, the charge will be paid and this information recorded.

f) If there is agreement that the charge is higher than the prevailing fee in the community, payment of the MRVS fee will be made after correspondence with the physician has pointed out that in accepting the assignment he has agreed to accept the Medicare fee as full payment for the services provided to the beneficiary.

EXHIBIT II

THE ULTIMATE METHOD OF PHYSICAN REIMBURSEMENT:

At the time this system is initiated, Michigan Medical Service will have a profile of customary charges for the services performed by every physician rendering service. It will also have a profile of prevailing fees for each specialty within each significant area. (The attached appendix gives detailed information on such profiles). By this time, Blue Shield will be in a position to implement a more refined computer pricing system.

1. As a part of the pricing routine, the doctor's charge in each case will be compared to his profile fee.
2. If the charge is equal to or less than the profile fee, payment will be processed according to the logic of the program.
3. If the charge is higher than the profile fee, the case will write off and correspondence initiated to determine if the doctor has increased his customary charge or is requesting special consideration.
4. If the doctor requests special consideration, the case will follow usual Michigan Medical Service channels of review.
5. If the doctor indicates that he has increased his customary charge and this is *below* the prevailing fee in the area, the charge will be paid and the doctor's profile updated.
6. If the doctor indicates that he has increased his customary charge and this is *above* the prevailing fee in the area, the doctor will be informed of this fact, the profile will be updated, and payment up to the prevailing level will be made to the beneficiary.

The implementation of this system is dependent upon the development of computer programs and the collection of credible information on physicians' customary charges. The systems analysis and computer programming will be completed by January 1, 1967. However, the decision to implement the program will be made only after analysis reveals that the stability and credibility of the accumulated data on physicians' fee satisfies the criteria established by the Social Security Administration and those which are required for statistical accuracy. At that time, the physician profile program and substantiating studies will be completed and the ultimate system initiated.

APPENDIX TO EXHIBIT II

PHYSICIANS' PROFILES:

Profiles:

Information which will be required to produce physician and procedure profiles is a part of the format of the basic tape record of payment. This includes the physician's code, his county code, his specialty code, and the procedure code, as well as the physician's charge. These data will be used to produce a procedure profile by county, a procedure profile by socioeconomic area, and a physician profile.

The county procedure program will display the profile in the following order:

1. County Code
2. Procedure Code
3. Specialty Code
4. Number of specialists reporting under code
5. Number of patients
6. Low charge
7. High charge
8. Most frequent charge
9. Number of most frequent charges
10. Percentile of most frequent charge

A similar display will be produced for each socioeconomic area. These profiles will be used to determine the prevailing fees for each specialty within the community.

The physicians profile program will display the information in the following sequence:

1. County Code
2. Physician's Code
3. Specialty Code
4. Procedure Code

5. Number of patients
6. Low charge
7. High charge
8. Most frequent charge
9. Comparison of most frequent charge to most frequent charge in county by similar specialists (County charge — 100%)

This display provides the profile of each physician's customary charges and comparison with prevailing charges of similar specialists in his county.

Supplementary Studies:

Processing of the charge data stored on tape will produce an accurate picture of customary charges under Medicare. This must be supplemented by studies to:

a) determine whether these charges coincide with charges to other patients;
b) measure these charges against the basic pattern of all other physician charges.

These studies will be based on three sources of information:

1. Data received on questionnaires sent to confirm customary charges;
2. Data procured by field personnel of Service Review Department in the course of established techniques of audit;
3. Other studies which the situation may indicate are necessary or appropriate.

These studies will be used to continuously analyze the efficacy of the system.

* * *

The Council approved a recommendation of this Committee that a committee be established to consist of a representative from MSMS, Michigan Department of Health, Michigan Hospital Service and Michigan Medical Service for the purpose of discussion and information on matters of utilization review as it relates to Public Law 89-97. The Council further accepted the recommendation by the Committee that B. C. Payne, MD, be named to represent MSMS and that all reports or informational material of interest to MSMS be reported to the Committee on Governmental Medical Care Programs for evaluation and necessary action by the Committee on Governmental Medical Care Programs.

Recently, the Committee has also been in negotiating sessions with representatives from the Office for Dependents' Medical Care for the Armed Forces and representatives of the Veteran's Administration. The Committee's success during these negotiations is emphasized by the fact that the Office for Dependents' Medical Care has agreed to the proposal of using the 1965 Michigan Relative Value Study with a conversion factor of $5 per unit as a basis for establishing maximum allowances for procedures contained in the ODMC Manual. Except for two minor areas that needed clarification, the Office for Dependents' Medical Care and this Committee have reached an agreement, which will be presented to the House of Delegates for its consideration. Officials representing the Veteran's Administration charged with the responsibility of the Veteran's Hometown Medical Care program acknowledged the desire of MSMS to utilize the 1965 MRVS with a $5 conversion factor. Due to a previous agreement, the level of fees for fiscal 1967 must remain approximately that calculated from the 1961 MRVS with a conversion factor of $5, because federal appropriations have been established for the Veteran's Administration many months ago. Although the Committee was not able to incorporate the 1965 MRVS at $5 conversion factor in the surgery section (now $3.80 per unit), as in the other sections of the contract for July 1, 1966 — June 30, 1967, the Committee is already making plans to notify the Veteran's Administration of our desire to negotiate the contract for fiscal 1968, to increase the surgery section to $5 per unit. Because the present contract expired on June 30, 1966, and insufficient time remained for Council approval, the Committee recommended that The Council accept the present VA Hometown Medical Care Contract as a matter of necessity in order to continue the program without interruption. The Council concurred with the Committee's request and approved the recommendation.

The Committee and staff have also been deeply involved in the Title XIX (Medicaid) program, which is the State program to care for those who are listed as either categorically or medically needy. Advance preliminary information has already been disseminated through all available news media, and frequent contacts are being maintained with the Michigan Department of Social Services to secure rules and regulations implementing this program.

THE REFERENCE COMMITTEE on Reports of Standing Committees, H. C. Tellman, MD, Chairman, accepted this report with grateful acknowledgement of the excellence of the report and of the heavy work load undertaken by the Committee on Governmental Medical Care Programs. The Reference Committee urged each delegate to read the segment entitled "Payment Program for Title XVIII (B)."

THE HOUSE adopted the report of the Reference Committee.

COMMITTEE ON HIGHWAY ACCIDENT PREVENTION

P. W. Gikas, MD, *Chairman*

The Committee on Highway Accident Prevention met on January 4, 1966.

Three recommendations were made to The Council for specific action:

1. Whereas, we are well along into our second million of motor car dead, and motor car injuries number nearly 1.6 million annually in the United States; and

Whereas, the number of motor car fatalities reached an all-time high in the United States in 1964 of nearly 48,000 persons; and

Whereas, the new highway fatality records were set during the past Christmas and New Year weekends with the loss of over 1200 lives; and

Whereas, medical research has demonstrated the significant influence automobile design and construction play on the type and severity of injury received by a car accident victim; and

Whereas, by virtue of Public Law 88-515, we have in progress Federal Standard 515 which prescribes the safety features which shall be incorporated in the motor cars purchased for use by the Federal Government; therefore be it

RESOLVED: That the Michigan State Medical Society supports, endorses, and urges the passage into law of United States Senate Bill 1251, which would apply 17 GSA Standards to all new cars purchased in U.S.A.; and be it further

RESOLVED: That the Secretary of the Society send copies of this Resolution to the President of the United States, the President of the Senate of the United States, the Speaker of the House of Representatives of the United States, the Secretary of Commerce, to each and every senator of the United States Congress, to the Automobile Manufacturers Association, and to the presidents of the four largest motor car manufacturing companies.

The Council referred this to the Legal Affairs Committee for consideration. This action resulted in a negative reply by that Committee. They objected to giving "blanket" authority to a cabinet officer in the issuing of safety standards. This action by the Legal Affairs Committee was most disappointing to the Chairman and members of the Committee on Highway Accident Prevention since we unanimously approved the Resolution.

2. This recommendation providing for the publication of the Legal Counsel's Opinion concerning "Immunity from Liability for Physicians Who Voluntarily Report on Physical Condition of Patients Who Should Not Drive or Fly" was approved by The Council.

3. This recommendation providing for a change in the name of the Committee to "Committee on Highway Injury" was referred back to the Committee for more information which the Chairman promptly provided in a letter to the Chairman of The Council. The Council approved the recommendation and referred it to the Constitution and Bylaws Committee.

Other pertinent subjects including the need for the regulation of ambulance traffic were discussed.

The following guests attended the meeting by invitation and submitted reports of programs in their respective fields:

1. Mr. Bruce B. Madsen, Michigan State University Traffic Safety Center.
2. Mr. Milan C. Clark, Michigan Department of State.
3. Mr. Gerald W. Shipman and Mr. Paul Hill, Michigan State Safety Commission.

The reports of these gentlemen were attached to the minutes of the Committee meeting in the form of addenda.

After intensive study of the problem of injuries resulting from automobile accidents during the past four years, we are convinced of the important role the vehicle plays in the production of these injuries due to lack of proper crash attenuating features. From the past performance of the automobile industry, we are also convinced that legislation is needed to stimulate the car makers to provide certain injury reducing safety items as standard rather than optional pieces of equipment. There have been sporadic attempts by the industry to introduce safety items but the public has no assurance such improvements will remain in future models without legislative compulsion. In our opinion the recent flurry manifested by the auto manufacturers in the field of car safety is directly related to the mounting pressure thrust upon them by the recent legislative hearings at both the state and federal level and the pending legislation.

The Committee believes legislation, as proposed in U.S. Senate Bill 1251, would be in the best public interest and justly deserves the support of physicians since it deals with a major public health problem — injuries resulting from automobile accidents.

It should be stated that the New York State Medical Society passed a resolution at its Annual Meeting in February vigorously supporting federal legislation which will apply safety standards to all new cars. The American Association for Automotive Medicine supported a similar resolution in November 1965. At the present time, there are some 72 bills on traffic safety pending before the 89th Congress. Some of these have to do with the federal regulation of minimum safety standards for automobiles. It is the hope of the Chairman that The Council will act favorably on a similar resolution supporting appropriate legislation in the future. Organized medicine should take a strong stand in support of this type of federal control which is in the best interest of the health of the nation. There are areas in which federal control is necessary and should be welcomed. The establishment of safety standards for automobiles and trucks is in our opinion one such area. The Society is not opposed to the federal regulation of construction and operation of aircraft. Why should we be opposed to federal automobile safety standards, particularly when the fatality rate per hundred million passenger miles is higher for auto travel than commercial airline travel?

During the past year, the Chairman testified concerning the influence of automobile design and construction on human injury at the hearings conducted by the Attorney General of the State of Iowa and before legislative committees in Michigan and New York as well as before the Commerce Committee of the U.S. Senate and the Committee on Foreign and Interstate Commerce of the U.S. House of Representatives.

THE REFERENCE COMMITTEE on Reports of Standing Committees, H. C. Tellman, MD, Chairman, recommended acceptance of the report as printed.

THE HOUSE adopted the report of the Reference Committee.

COMMITTEE ON IODIZED SALT

B. E. Brush, MD, *Chairman*

The Committee on Iodized Salt has continued to do a courageous job in a tremendously important area of preventive medicine with only meager financial support.

In other countries, laws have been passed to ensure the use of iodized salt and thus prevent endemic goiter. Our path in Michigan has been that of repeated surveys and campaigns to attain this same goal.

Our Committee is now anxious to do a better job for the people of Michigan. We have some research projects, campaigns, reports, etc., all of which need sounder financing than we have had in the past.

It has been approved by the Committee that a Michigan Thyroid Association be formed which would act as an agency to receive monies from the United Fund as do the Michigan Diabetes Association and some other agencies. This would enable us to make a more significant contribution in this area and be relieved of the financial aspects which have prevented us for many years from living up to our potential.

The Founding Group has suggested that the Michigan Thyroid Association be a joint effort of the Michigan State Medical Society, the Michigan Department of Public Health, perhaps the Salt Producers Association, and probably several other groups.

The Committee is now working on a report to submit to The Council for its consideration. The report will contain a detailed proposal with supporting data and a proposed budget.

Two meetings were held during the year.

THE REFERENCE COMMITTEE on Reports of Standing Committees, H. C. Tellman, MD, Chairman, recommended acceptance of this report as printed.

THE HOUSE adopted the report of the Reference Committee.

COMMITTEE ON LEGAL AFFAIRS

Otto K. Engelke, MD, *Chairman*

The 1965 legislative activities of the Michigan State Medical Society were the most complex and rigorous ever undertaken by our Society. Every statistic given in the 1965 report is dwarfed by the efforts which have been required during 1966 to protect the best health interests of the people of Michigan.

Once again, however, in spite of the fact that dozens of separate bills required exhaustive attention concurrently, and in the face of odds which frequently seemed almost hopeless, the Committee is able to report to the House that with few exceptions no new laws have gone on the books which were considered by MSMS to be detrimental to quality health care. At the same time, the Legislature has passed some new statutes vigorously supported by the Society.

Your Legal Affairs Committee found it necessary to meet five times during 1965, and six times within the first four months of 1966. Whereas one hundred and thirty-three bills were analyzed last year, the number rose to one hundred and seventy-eight this year. Ten "Medigrams" were sent to the entire membership in 1965. In 1966, thirteen "Medigrams," for a total of fifty-three factual pages, were mailed to each member. More special meetings between MSMS representatives and state elective and appointive officials were required than ever before. A closer liaison had to be developed between MSMS and like-minded organizations to join ranks in fending off attacks upon professionalism and attacks upon excellence.

At the time of the summer recess of the State Legislature, when all bills had been acted upon except for a few remaining in "conference" to resolve differences between the Senate and House of Representatives, an analysis of the preceding six months of intensive activity was presented to The Council, MSMS. All one hundred and seventy-eight proposals studied by the Committee were listed and showed that they related to the concerns of twenty separate MSMS committees. The Council took full cognizance of the magnitude of the ever-growing impact of government upon medicine, and it is seeking to develop additional mechanisms to continually strengthen and improve MSMS' capacity to meet the growing challenges. The volume of legislative matters will continue to expand.

1966 has been an eminently successful year because of a total team effort. The Committee has worked hard and long, and it particularly commends the legal affairs staff and associates at MSMS. The Committee also wishes to express its sincere appreciation to each and every MSMS member who has given of his time and talent to bring medical-health facts to individual legislators and legislative committees. The Committee recognizes, with much thanks, the significant support given MSMS by many other organizations (such as, for example, labor) in opposing new laws which would dilute quality care. Our successes, individually and collectively, cannot be attributed to any one individual or group but rather to the impact of many coordinated factors.

This legislative session was, in many ways, dominated by the proposal that Michigan support a separate school of osteopathic medicine. From the time of the state-wide survey of all doctors of medicine and osteopaths, through several full-dress legislative hearings, to the taking of three separate votes on this proposition, concern with SB 272 preempted much of MSMS' communication with its members. SB 272 was defeated, not once but three times, and a costly and divisive separate osteopathic school was rejected. While this conflict raged, however, battles were also being won on many other highly important fronts.

A strong coalition of forces attempted to change a proposal for hospital licensing into a law for the franchising of hospitals. MSMS and the Michigan Hospital Association, standing alone against powerful forces, were able to prevail and defeat the franchising proposal with great effort. At the same time, a proposal which would have permitted optometrists to engage in elements of the practice of medicine was under consideration simultaneously in Senate and House committees; it was defeated in both places after much concentrated activity.

Concurrently with the MD-DO, hospital franchising, and optometric problems a complicated bill to implement "Medicare" was proceeding through the legislative process, requiring frequent conferences with both state administrators and legislative committees, development of amendments and testimony, and constant vigilance. During this period MSMS representatives made a quick trip to Washington, D.C., in the company of state officials to discuss problem areas with Health, Education, and Welfare executives, making Michigan the first state in the union to involve its medical society personnel in such an activity. Our efforts were important in securing a new state implementation law which, unlike those in some other states, calls for an orderly and realistic entry into this significant new program.

MSMS also was forced to turn much of its attention to a proposal by chiropractors which, in the form in which it was introduced, was totally undesirable and would clearly have permitted "doctors of chiropractic" to practice medicine. Time after time this bill was amended to remove one objectionable feature after another; time after time it was killed only to be revived by the pressure of a few legislators in key positions. Although the final version of the bill bore only a slight resemblance to the original version, it passed both houses of the Legislature containing language which was so vague as to require a legal interpretation of many of its provisions. MSMS urged a Governor's veto. MSMS supplied the Governor with several reasons why this action would be in the public interest.

Similarly, a bill encroaching upon the right of Michigan Hospital Service to require certain controls over podiatrists was maneuvered through the legislative process by a handful of powerful lawmakers. Although this bill, in view of the volume of problems described above, was not given top priority by MSMS, much time and effort was put forth in urging its defeat. MSMS applauded the Governor's action in also vetoing this bill.

While concerning itself with the half-dozen critical bills mentioned above, MSMS also conducted many meetings with the representatives of the nursing profession, attended several hearings, and developed amendments to an important new proposed Nurse Practice Act. At stake was the right of physicians to assign certain tasks to their medical assistants without thereby being in violation of the new law. Much time and effort was placed upon this vital matter in both the Senate and the House.

Thus, during the period from January through June, MSMS found itself involved at one and the same time with complex and often interrelating bills dealing with MD-DO, hospital, optometric, chiropractic, podiatric, nursing and "Medicare" matters and, without exception, the final result in each case was that desired. In spite of the obvious magnitude of this task, however, these seven bills, while emphasized, constituted a minor fraction of the total legislative involvement.

Twenty-seven separate bills analyzed by the Committee could be categorized as "public health" proposals; twenty-eight additional bills were studied in the mental health area; another twenty bills dealt primarily with hospitals or nursing homes; seventeen separate bills were in the area of child welfare, thirteen more dealt with one of the governmental medical care programs, nine had to do with prepayment insurance, another nine were related to the work of the Highway Accident Prevention Committee. There were more bills dealing with: crippled and afflicted children, alcoholism and drug addiction, education, cancer, respiratory diseases, venereal disease, rehabilitation, pharmacy, aging, and workmen's compensation. On top of all of these, there were twenty-eight more which for lack of a more specific designation were simply categorized as "medical legal affairs" bills!

Out of this tremendous volume of health-related legislative proposals, the Committee narrowed its active involvement down to forty-four individual bills, while watching many others so as to be prepared to "step in" if they were amended in objectionable ways.

Eighteen bills opposed by MSMS as undesirable were killed in committee; two opposed bills were passed but subsequently vetoed by the Governor, and seven separate bills which were supported by MSMS were enacted into law for a total of twenty-seven desired legislative actions. Four bills opposed by MSMS were enacted into law: coverage (but not expansion) of chiropractic services was permitted by law under health insurance (not Blue Shield), compulsory immunization for measles, and two separate compulsory tuberculosis testing bills.

The Committee also reports that it will be necessary for MSMS to again support, in a future session, thirteen proposals which it endorsed but which failed to pass during 1966.

Bills enacted which were supported by MSMS included: increased state support for local health departments and extension of such departments to all counties; immunity from civil liability for health department officers and employees; better implementation of the Community Mental Health Services Law; control of fraudulent advertising claiming physician endorsement; better "family planning" legislation; a licensing law for hearing aid sellers; and an improvement in the law regulating the testing of intoxicated drivers.

Bills unsuccessfully urged upon the Legislature during 1966 included new codification of health laws, physician supervision of certain laboratories, creation of a Public Health Commission, creation of a Mental Health Commission, increased state support for tuberculosis program costs, hospital licensing, licensing of opthalmic dispensers, repeal of the Basic Science Law and creation of a statewide medical examiner system. An Attorney General analysis is being made of the necessity for a "product warranty" bill.

This Annual Report is supplemented by the section in the Annual Report of The Council MSMS dealing with Legal Affairs (Part I, pages 9-11). The Committee recommends a careful reading of this report by each Delegate and particularly urges attention to its final two paragraphs which underline the importance of year-around, county medical society attention to legislative liaison, and to the involvement of physicians in the election process.

Finally, the Committee notes that the July 25, 1966, "Medigram" and the September issue of "Michigan Medicine" both contain lists and details of new 1966 health laws. As various state agencies adopt rules and regulations with respect to new statutes, these will be the subject of articles in the Journal,and a continuing effort will be made to provide full and factual information to all MSMS members regarding health laws which affect their practice of medicine.

THE REFERENCE COMMITTEE on Reports of Standing Committees, H. C. Tellman, MD, Chairman, accepted this report with grateful recognition of the tireless activity that this legislative activity obviously required, and also commended the MSMS legal affairs staff.

THE HOUSE adopted the report of the Reference Committee.

COMMITTEE ON MATERNAL HEALTH

W. W. Jack, MD, *Chairman*

The Committee on Maternal Health is able to report another successful year.

Three meetings were held, as follows: September 30, 1965, January 13, 1966, and May 12-13, 1966, at the MSU Kellogg Biological Station at Gull Lake. At the latter meeting, 32 persons were present and four papers based upon material from the Michigan Maternal Mortality Study were presented by members of the Committee. It is expected that these papers will be offered for publication. In addition, some time was spent exploring the role of the physician in family life education. A guest, Dr. George Chamis of the Flint School System, led a very interesting discussion. The Committee extends its appreciation and thanks to the many physicians who have contributed to the Michigan Maternal Mortality Study and to the Michigan Department of Public Health for its continued support. Efforts to utilize this material continue to be a major activity of the Committee.

The Fifth Annual Conference on Maternal and Perinatal Welfare was held in Flint on March 24-25, 1966. Over 260 persons attended this informative session with outstanding speakers from Michigan and from out of the state. The Committee is grateful to Clara Elizabeth Fund of Flint for the financial support it gave to this Conference. The Sixth Annual Conference on Maternal and Perinatal Welfare is again scheduled for Flint on March 15-16, 1967. As in past years, this Conference will be of special interest to general practitioners, pediatricians, obstetricians-gynecologists and pathologists. All members of the Michigan State Medical Society will be kept informed of the program and speakers.

The Committee continues to distribute Desk Reference Cards, covering several aspects of the practice of obstetrics and resulting complications, to Michigan doctors who are practicing obstetrics. A questionnaire postal card was included in the mailing of Desk Reference Card No. 6 to ascertain the value of these cards. From approximately 2,000 questionnaires mailed, 822 were returned. In answer to the question, "Do you read these cards"? — 735 answered "yes" and 66 answered "no."

In answer to the question "Are they of value to you in your obstetrical practice"? — 693 answered "yes" and 66 answered "no."

The members of the Committee felt that this was a good indication that the printing and publication of Desk Reference Cards should be continued. Accordingly, Desk Reference Card No. 7 entitled "Toxemias of Pregnancy" was distributed in the spring and Card No. 8 on "Resuscitation of the Newborn" is being prepared for fall distribution.

In December of 1965, a complete set of the Desk Reference Cards and a copy of the Michigan Perinatal Mortality Study Plan were sent to Michigan's hospital administrators. The Committee thought this information would be of assistance to hospital staffs concerned with decreasing the perinatal mortality rate and the number of defects and disabilities in newborn infants. It is hoped that the plan will be adopted by hospitals and their medical staffs throughout Michigan, in the interest of eliminating preventable factors that cause serious handicaps in children. The Committee's exhibit "Bootie Hill" which dramatizes the causes of perinatal mortality was shown first at the Flint meeting and will be exhibited at the Annual Session of the Michigan State Medical Society in Grand Rapids.

In the near future, the Committee will complete the "Physician's Guide for Family Planning." This proposed authoritative guideline written in such a manner as to be helpful to physicians (less familiar with this subject), to social workers, and in the teaching of medical students and student nurses, etc., will be published by the Michigan Department of Public Health.

The Committee has also expressed interest in the development of a Michigan Plan for the Identification of the High-Risk Mother. Another subject for possible study by the Committee will be a review of the statutes governing therapeutic abortions.

All members of the Committee send their best wishes for a happy retirement to Goldie B. Corneliuson, MD, a long-time member of the Committee. It is the hope of all that she will continue to maintain her interest and participation in the activities of the Committee on Maternal Health.

The Chairman, William W. Jack, MD, wishes to express his sincere appreciation and thanks for the support and cooperation he has received from the members of the Committee, The Council, and Miss Helen Schulte of the MSMS staff. In addition, the Committee received with great pride the commendation from the 1965 House of Delegates.

THE REFERENCE COMMITTEE on Reports of Standing Committees, H. C. Tellman, MD, Chairman, accepted this report with commendation for the Committee's continuing effort in maternal health education.

THE HOUSE adopted the report of the Reference Committee.

COMMITTEE ON MEDICAL SOCIO-ECONOMICS

H. F. Falls, MD, *Chairman*

The Committee on Medical Socio-Economics has made substantial progress on its long range planning project of having experts prepare position papers dealing with the environment in which medicine will be practiced in 1980. To date the Committee has received and reviewed the following papers:

1. "The Interrelationship of the Medical Profession and the Public" by Odin W. Anderson, Ph.D., of the University of Chicago.
2. "The Influence of Health Insurance on the Future Practice of Medicine" by Charles Hall, Ph.D., of Temple University.
3. "Future Physician Manpower Needs" by Grant Osborne, Ph.D., of the American Medical Association.

The following additional papers have been contracted for and will be submitted to the Committee sometime in late fall or early winter:

1. "The Influence of Medical Facilities on the Future Practice of Medicine" by Ray Brown, Director of Graduate Program in Hospital Administration, Duke University.
2. "The Influence of Closed Panel Direct Service Plans on the Future Practice of Medicine" by Caldwell B.

Esselstyn, MD, Executive Director, Community Health Association, Detroit.

3. "The Influence of Government Plus Other Factors on the Future Practice of Medicine" by Herbert S. Klarman, Ph.D., School of Hygiene and Public Health, Johns Hopkins University.
4. "The Future of Medical Education" by Charles Tupper, MD, of the University of California.
5. "The Future of the Professions and Professional Organizations" by Hugh W. Brenneman, Executive Director, Michigan Association of the Professions.
6. "The Future of Organized Medicine" by Leland S. McKittrick, MD.

Tentative publication plans have been made so that a wide distribution of the expert opinions contained in the papers can be made to component medical societies just as soon as the project is completed.

THE REFERENCE COMMITTEE on Reports of Standing Committees, H. C. Tellman, MD, Chairman, accepted this report with commendation and commented: "The position papers are a unique approach to help us prepare for socioeconomic changes today and in the future."

THE HOUSE adopted the report of the Reference Committee.

COMMITTEE ON MEDICINE AND OSTEOPATHY

J. J. Coury, MD, *Chairman*

Since the meeting of the 1965 House of Delegates, your Committee on Medicine and Osteopathy has had a very busy year.

Five major meetings have been held, in addition to numerous personal contacts and group meetings, resulting in the study and activation of the actions of the House of Delegates.

In addition to these, many presentations were made by members of the Committee to county society meetings.

In December, 1965, your Chairman testified before the State Affairs Committee of the Michigan House of Representatives, along with the deans of the medical schools of Michigan, in opposition to the proposed osteopathic school.

As a result of this meeting the Legislature then mailed a questionnaire to MDs and DOs. The results of the poll are well known by all of you and need no detailed elaboration.

Your Committee is extremely proud of the MDs of Michigan because of their willingness to "bury differences" so that the health care of the people of Michigan could be improved. We are only sorry that the osteopathic physicians were not so inclined.

This poll precipitated, before and since, a flurry of statements, half truths, irrelevancies, and ungentlemanly utterances by certain influential members of the osteopathic profession and the Legislature. This was countered by a vast majority of clear thinking groups and individuals, along with the communication media and a great portion of the Legislature. Their objectives were the same as ours — "to improve the health care of the people of Michigan."

Again, prior to the final defeat of SB 272 — the Deans of the University of Michigan, Wayne and Michigan State Schools of Medicine, along with the State Medical Society, testified before the Ways and Means Committee of the Michigan House of Representatives.

Much credit must be given to the extremely able and hard working Legal Affairs Committee and State Society staff.

Your Committee is convinced that the issue is not dead and more effort will be put forth in the near future to establish a tax-supported osteopathic school — and *continued* effort to *defeat* such a proposal must be carried on by our State Medical Society if we are to continue to live by our goal that "we must do what is best for the health care of the people of Michigan."

Your Committee, though disappointed by the negative vote presented to the public by the DOs in February, felt that our Society should not react negatively but should continue to adhere to the policies set forward by this House of Delegates.

We must not live and think in the past but in the present and future.

THE REFERENCE COMMITTEE on Reports of Standing Committees, H. C. Tellman, MD, Chairman, accepted this report with commendation for the vigorous approach to the problems which arose during 1965-66, and commented: "We hope that they will continue with the ultimate goal of amalgamation in the future."

THE HOUSE adopted the report of the Reference Committee.

COMMITTEE ON MENTAL HEALTH

Benjamin Jeffries, MD, *Chairman*

Since the 1965 meeting of the House of Delegates, this Committee has conducted six meetings and, in order to better keep The Council fully informed of developments in the mental health-mental illness area, has been represented at two highly important meetings sponsored by the American Medical Association and one state-wide Michigan Governor's Conference on Mental Health.

In October of 1965, after six months of study and deliberation, the Committee recommended a comprehensive new policy statement to The Council dealing with psychiatric services for children, and this was adopted and widely publicized.

In November, the Committee successfully embarked upon an expanded program of liaison with those Michigan legislators who are primarily concerned with mental health legislation, thus creating a rapport which has enabled the Committee to more successfully serve The Council and cooperate with the MSMS Legal Affairs Committee in providing technical advices in a health area receiving increasing attention by lawmaking bodies.

In December, cooperating with the MSMS Committee on Nursing, the Committee participated with representatives of the nursing profession in discussing the appropriate role of nurses in augmenting the clinical specialty of psychotherapy and related mental health activity.

In February, a questionnaire sent to the more than four hundred and fifty lay and medical persons who are particularly active in the new Michigan community mental health program clearly demonstrated that the Committee's "A.I.D. Bulletin" is serving an extremely useful purpose in establishing organized medicine as a primary source for factual, professional information and is doing much to strengthen medicine's leadership role in this new approach to mental health.

As a result of the questionnaire the Committee recommended to The Council that "A.I.D." be continued as a valuable service to both non-psychiatric physicians and lay leaders throughout Michigan.

The Committee, throughout the year, has continually reviewed developments in both health insurance contracts and collective bargaining agreements providing for psychiatric services, and reported on these to The Council. In addition, it has constructively involved itself in the legislative process, assisting the Legal Affairs Committee by reviewing proposed legislation and recommending an MSMS position on mental health proposals. In its meetings, the Committee has been pleased to have available the viewpoints of the State Department of Mental Health through the participation of the Department's Medical Director or his designated representatives.

At its final meeting of the year, the Committee engaged in a complete review of all new 1966 mental health laws for the purpose of determining upon necessary interpretations for the total Society. An exploration was also commenced of alternative techniques for the purpose of more effectively bringing current information regarding mental health-mental illness to fellow physicians in the other medical specialties.

THE REFERENCE COMMITTEE on Reports of Standing Committees, H. C. Tellman, MD, Chairman, accepted this report with the recommendation that MSMS maintain the very closest of liaison with the Director of the Michigan Department of Mental Health through The Council of MSMS.

THE HOUSE adopted the report of the Reference Committee.

COMMITTEE ON OCCUPATIONAL HEALTH

William Jend, Jr., MD, *Chairman*

The Committee met formally on January 13, 1966. Informal consultation among the members was held at various times throughout the year to consider Committee business.

Resolution No. 4 of the 1965 Michigan State Medical Society House of Delegates dealing with the hiring of the handicapped was referred to the Committee for analysis and recommendations to the Legal Affairs Committe. The Committee concurred in the objectives of this proposal but felt that complex legal matters, including present practices and judicial interpretations of workmen's compensation legislation, presented serious obstacles to remedial legislation.

The Committee felt that the changes in workmen's compensation legislation recommended by it two years ago were still very much needed, not only to help with the hiring of handicapped people but also to maintain the integrity of the medical profession. The Committee pledged itself to work with the Committee on Workmen's Compensation to this end.

There was extended discussion about the necessity for all members of the Society working together on occupational health problems. It was felt that this Committee should take the lead in promoting informal meetings and other bridges of interest between it and physicians in general practice, as well as other specialists. Plans are being developed to accomplish this.

The articles in Michigan Medicine sponsored by this Committee were well received. Possible future articles will be discussed at the next meeting.

The Committee recommended that MSMS institute a well-rounded program of preventive medicine, as outlined by the AMA Council on Occupational Health, for its own employees.

In response to a question from an osteopathic physician about establishment of an industrial clinic, it was felt that this was no different from other questions on doctor of medicine — osteopathic physician relationships and the same rules should apply.

Problems in connection with the participation of plant physicians in in-plant screening programs conducted by various agencies were reviewed. This is to be considered further by the Committee.

THE REFERENCE COMMITTEE on Reports of Standing Committees, H. C. Tellman, MD, Chairman, recommended acceptance of this report as printed.

THE HOUSE adopted the report of the Reference Committee.

COMMITTEE ON POSTGRADUATE MEDICAL EDUCATION

H. A. Towsley, MD, *Chairman*

The Committee on Postgraduate Medical Education held two meetings during the year to develop plans and programs for the fall and spring extramural sessions of 1965-66.

At the June, 1965, meeting, the Committee decided to continue in 1965-66 the general format of the programs in the same centers for continuing education as previously. Basically, this plan is to provide, wherever possible, the clinical conference approach to continuing education, and where the clinical conferences cannot be arranged by the local medical group, to provide the didactic lecture presentation.

Further planning during the year included the provision of an afternoon clinical conference and evening presentation of lectures for the physicians in Grand Rapids. This program was offered especially since the annual session of the MSMS had not been held in that city for two years. An excellent panel of discussants was provided for this clinic and great effort was made by the local chairman, Dr. Dugald MacIntyre, and the staff at Blodgett Hospital to make this a successful program. The meeting was attended by 103 physicians out of a MSMS membership in the area of approximately 475, or 21.7 per cent. Since Grand Rapids is not a regularly scheduled center for the extramural program, it is not included in the

CENTERS	Attendance Fall 1965	Attendance Spring 1966	Physicians registered for one or both meetings 1965-66	Membership-County Medical Society Potential number	Membership-County Medical Society % attendance of members 1965-66
Alpena	22	17	25	32	78.1%
Battle Creek	57	56	72	143	50.4
Cadillac	—	23	23	18	128.0
Grayling	22	21	24	29	82.7
Jackson	48	—	48	115	41.7
Lansing	65	111	123	287	42.8
Midland	56	53	74	53	140.0
Muskegon	62	36	77	134	57.4
Niles	38	47	63	106	59.0
Petoskey	27	16	31	55	56.3
Port Huron	31	43	55	80	68.7
Traverse City	35	—	35	73	48.0
Upper Peninsula					
Escanaba	16	20	23	25	92.0
Houghton	15	14	19	23	82.6
Iron Mountain	15	11	16	24	66.6
Ironwood	9	9	10	12	83.3
Manistique	3	4	4	4	100.0
Marquette	21	26	30	53	56.6
Menominee	21	20	24	24	100.0
Sault Ste. Marie	20	20	25	25	100.0
	686	547	801	1315	

percentage attendance table for the year. It is recognized that all the major hospitals in the Grand Rapids area have exceptionally fine residency programs. Consequently, the staff members of these hospitals participate actively in intern and residency teaching and, in support of their programs, frequently bring in outstanding medical scientists for conference teaching.

The attendance at the 20 centers for the fall and spring 1965-66 session was 801 physicians out of the MSMS membership of 1315 or 60.9 per cent of all the physicians in those geographical areas where the programs were given. The following tables show the attendance record for each of the extramural centers. These percentages compare favorably with those for the centers submitted for 1964-65.

Fall and spring enrollment current year. 801 individual physicians attending. Represents 60.9% of medical doctors residing in 20 centers where programs were provided.

The Committee notes particularly the attendance of physicians in the Upper Peninsula centers. The MSMS membership in the eight participating centers is 190 physicians. The record shows that 151 physicians took advantage of the programs, or approximately 80 per cent of all members in that area.

The higher attendance by physicians in the less densely populated areas may suggest that consideration should be given to providing continuing education programs to additional areas where population densities are similar to those for the Upper Peninsula.

The Committee expresses its appreciation to the following speakers from the faculties of the medical schools of the State for their fine participation in the teaching program: Drs. F. A. Arcari; Carl E. Badgley; Walter M. Baird; William H. Beierwaltes; Robert J. Bolt; Ralph L. Brandt; Thomas A. Bruce; Arthur C. Curtis; David G. Dickinson; Reed O. Dingman; Tommy N. Evans; Earl R. Feringa; F. Bruce Fralick; A. James French; E. Richard Harrell; Saul I. Harrison; George H. Koepke; Raymond S. Kurtsman; George E. LaCroix; Isadore Lampe; A. Martin Lerner; George H. Lowrey; Joe D. Morris; Reed M. Nesbit; Gerald A. O'Connor; Lawrence Power; Frank N. Ritter; David R. Rovner; Richard C. Schneider; John M. Sheldon; William S. Smith; Robert W. Sweet; Alan Thal; Norman W. Thompson; Harry A. Towsley; Alexander J. Walt; James L. Wilson; William S. Wilson; Earl F. Wolfman; Walter P. Work.

The very great assistance of the local chairmen in organizing the programs is recognized by the Committee. Without their help, it would be impossible to arrange the material for presentation at the clinical conference programming, which in the opinion of many of the recipients and most of the faculty participating in this program is the most satisfactory method for continuing education.

The Committee regrets the resignation of Dr. C. J. Tupper from its membership, and wishes him success in his new position as Dean of the Medical School at Davis, California.

THE REFERENCE COMMITTEE on Reports of Standing Committees, H. C. Tellman, MD, Chairman, accepted this report with commendation for excellence of the postgraduate program and the results obtained.

THE HOUSE adopted the report of the Reference Committee.

COMMITTEE ON PROFESSIONAL INSURANCE PLANS

FREDRICK WEISSMAN, MD, *Chairman*

Group Disability Insurance Plan. Cooperative action by the Committee and the Provident Life and Accident Insurance Company has resulted in a material improvement in the MSMS Group Disability Insurance Plan. The master policy has been amended to provide a conversion privilege to each practicing insured member under 65 years of age. Conversion from the group coverage to an individual guaranteed renewable policy may be made if for some reason the master policy should be discontinued by MSMS or Provident Life and Accident Insurance Company, or in the event that the insured should leave Michigan. The conversion policy will provide the same coverage as the master policy and will be guaranteed renewable to age 70.

MSMS Insurance Brochure. A brochure, explaining all MSMS group insurance programs, plus additional insurance coverages which should be considered by the physician, was prepared by the Committee and the MSMS Insurance Advisor, Mr. Ben P. Stratton. A copy of this brochure was mailed to each MSMS member to assist him in the planning of his personal insurance program.

Liability Insurance. The Committee is deeply concerned over the fact that the last five years have resulted in an alarming increase of professional liability claims and suits against Michigan physicians, which has resulted in a rise in professional liability insurance premiums. Although present Michigan insurance laws do not permit the offering of casualty insurance on a group basis, the Committee is continuing its investigation in the areas of group professional liability insurance and group umbrella liability insurance. Meetings have been held with representatives of several casualty insurers, including the Empire Casualty Company of Colorado.

Group Life Insurance Dividend. This Committee is pleased to announce that a group life insurance dividend in the amount of $16,592 was distributed among all MSMS member policyholders in June. This is a key indicator of the success of the group life insurance plan.

THE REFERENCE COMMITTEE on Reports of Standing Committees, H. C. Tellman, MD, Chairman, accepted the report and commented: "It is brought to the attention of the House that the 'umbrella liability insurance' is available to offer protection to members of hospital staff committees and county and state committees including the Judicial Commission. Information on such insurance will be published in the MSMS Journal."

THE HOUSE adopted the report of the Reference Committee.

COMMITTEE ON PUBLIC HEALTH

O. D. STRYKER, MD, *Chairman*

During the past year, the Committee considered the following:

1. *Venereal Disease Educational Campaign.* In order to cooperate with the American Medical Association's Health Education Campaign to combat venereal disease, and because this matter might fall in the field of public health, this subject was discussed by the members of the Committee at its meeting on April 20, 1966. Inasmuch as there has been no active rôle taken by the Michigan State Medical Society or by its component medical societies in venereal disease educational efforts since around the year 1950, the Committee feels it important that something be done in this regard. The following resolution was adopted by the Committee, approved by The Council, and referred to the Committee on Public Relations:

(Resolution on Venereal Disease Education Campaign)

"Whereas, venereal disease is on the increase in the United States, even in view of the fact that it is known how to medically cure it and how to prevent it; and

"Whereas, the American Medical Association, which has been a pioneer in public education about venereal disease, has launched a national campaign against it; and

"Whereas, the American Medical Association has requested the full cooperation and help of the individual state medical associations and their component county medical societies; and

"Whereas, the Michigan Department of Public Health is concerned over the lack of interest in this disease by the practicing physician in the State of Michigan; and

"Whereas, the members of the Committee on Public Health of the Michigan State Medical Society are equally concerned about the increase in the incidence of venereal disease and the fact that there has been no active educational campaign on this disease since around the year 1950; therefore be it

"RESOLVED: That the MSMS Committee on Public Health recommends that full responsibility in this matter be recognized by, and accepted by, the Michigan State Medical Society and its component medical societies, and by the Michigan Department of Public Health and its local health departments; and be it further

"RESOLVED: That each segment of responsibility, in conducting an up-to-date educational campaign on venereal disease, be assigned to the participating groups."

2. *Chairs of Preventive Medicine and Public Health.* The MSMS House of Delegates, in September, 1957, adopted a resolution ". . . suggesting the establishment of a full-time Chair of Preventive Medicine and Public Health by both of Michigan's medical schools." The Committee, at its meeting in June, 1965, reiterated the 1957 policy position of the House of Delegates regarding this matter. At its April 20, 1966, meeting, the Committee heard reports from representatives of the University of Michigan and of Wayne State University and adopted the following recommendation, subsequently approved by The Council:

"That commendation be given to the Wayne State University School of Medicine and the University of Michigan Medical School for their efforts and plans to follow through on the recommendation of the MSMS House of Delegates and that the full support of the State Society, through its Committee on Legal Affairs, be given to the two medical schools to assure their achieving their goal. The Committee on Legal Affairs is requested to help assure that the matter of financial assistance to the two Michigan medical schools, to carry out their proposed public health and preventive medicine programs, be given priority by the Michigan Legislature."

3. *Definition of "Public Health" and the "Role of a Public Health Department."* The following definition as offered by the Committee was approved by The Council.

"That the following be considered the *"Precise Definition of 'Public Health' and 'The Proper Role of a Public Health Department:'*

"A. *Public Health Services are concerned with*:

1. The promotion through education of individual and public health.
2. The prevention and control of disease and injury.
3. Prolongation of life.
4. Provision of a healthful environment.
5. Education of the individual and groups in healthful living.
6. The planning, organization and administration of medical care programs for special groups of the population.
7. The coordination of planning and administration of health services.

"B. *Public Health Services do not include*:

1. The person-to-person relationship of a physician and the patient.
2. The private practice of medicine.

"C. *The objective of public health services* is to provide a salubrious environment in which families can flourish in optimal health, happiness and contentment.

"D. A *public health department* is a legal entity required by Michigan statute. Its powers, duties and functions should be those vested in it by State statute and by the community for the protection of the health of the people of the community it serves. It should coordinate and cooperate with the efforts of medical societies, voluntary health association and other health-oriented groups in promoting efforts to improve the health of the people. It is the responsibility of the organized medical profession to assume an important leadership role in such efforts. State and county medical societies, and departments of public health, should mutually cooperate in the interest of public health and should always keep in mind the need for a proper balance between public health programs and the private practice of medicine."

THE REFERENCE COMMITTEE on Reports of Standing Committees, H. C. Tellman, MD, Chairman, recommended acceptance of this report as printed.

THE HOUSE adopted the report of the Reference Committee.

COMMITTEE ON PUBLIC RELATIONS

Brock E. Brush, MD, *Chairman*

The goals of the Public Relations Committee involve every member of the House of Delegates, every officer and member of The Council, every committee chairman, and, in effect, every MSMS member.

The Committee met twice during 1965-66 to review its activities and to plan new programs to meet MSMS responsibilities for leadership. All of the activities generally sought to win the added respect and renewed confidence of the people in the medical profession in Michigan and in their individual doctors of medicine.

The total MSMS public relations efforts include not only those projects related to the MSMS Committee on Public Relations but also many activities carried out by the staff under the direction of The Council. Many of these latter projects grew out of recommendations of the last House of Delegates, or from other MSMS committees. Some of the following comments therefore may be covered by some other MSMS committee with different reflections.

The following activities are not related in any special order of importance.

Healthmobile: One of the major MSMS efforts this past year in public education, career recruitment and community relations was the MSMS Healthmobile, a health-museum-on-wheels. Although not a responsibility of the MSMS Public Relations Committee from a budgetary standpoint, it seems logical to include the Healthmobile story in this PR Committee report.

Dedicated at the 1965 MSMS Centennial Session, the mobile unit has traveled across the state under the sponsorship of the county medical societies to tell school children and adults about the exciting Michigan developments in medical research and health care.

The Healthmobile first appeared in Ingham County on October 15 and traveled into a different community each week, with the local woman's auxiliary serving as hostesses. Excellent cooperation was obtained from city and school officials, power companies, police departments and mass media. By July 1, the Healthmobile had visited 33 communities. Attendance for the October 15 — July 1 period was an estimated 80,000, incluuding 50,000 children.

Contributions towards the cost of developing the Healthmobile included $10,500 from the Sears-Roebuck Foundation, $1,000 from Merck, Sharp & Dohme and a contribution from the AMA.

The 12 x 50 foot mobile unit, built to MSMS specifications, was loaned to the State Medical Society by the Marlette Coach Company. Special exhibits were developed by the three medical schools, the Michigan Department of Public Health, The Upjohn Company, Parke, Davis and Company, Michigan Health Council and the AMA. Other authentic displays helped to develop the slogan "A Century of Service in Medicine."

Generally the Healthmobile focused attention on the contributions of Michigan medicine and the concern of Michigan physicians for the good health of Michigan residents. Locally, it served as an excellent public educational device for the county medical society and its auxiliary to perform a service for the school children, their parents and other interested adults. The impact the unit had on good health practices and career recruitment cannot be measured but, undoubtedly, was considerable.

The health-museum-on-wheels proved to be a logical outgrowth of the 1965 MSMS Centennial observance of a "Century of Service in Medicine." (Attached as Addendum A is the schedule for the Healthmobile for the official record).

Career Booklets: MSMS registered another "first" during the past year when MSMS worked with the AMA on the production of the new AMA "Horizons Unlimited" career booklet. For many years, MSMS had published its own booklet about careers in the health field. This time, MSMS provided special copy to the AMA for an eight-page yellow insert to tell the readers about 51 health careers offered by 115 Michigan colleges, hospitals and institutions. Ten thousand copies of the 142-page handbook were purchased and distributed to junior and senior high school counselors, career advisors at colleges, high school, college and community libraries and others who play special roles in advising students and parents about higher education and careers. The eight-page insert was reprinted for broadside distribution through the MSMS Healthmobile, health fairs, woman's auxiliary units, etc. Many fine comments were received from educators, physicians and others. A copy of the booklet was made available to interested MSMS members for individual use in career counseling or in public speaking.

Special Efforts re Medical Education: Throughout the year, MSMS stepped up its activities to tell the public and special audiences about the particular Michigan needs in medical education. Efforts to provide copy and material for newspapers, radio and television programs stressed the need for expansion of the three medical schools and the weaknesses in the proposed osteopathic school approach.

Medicare Information: MSMS helped to inform the general public of the advantages for the aged to sign up for Medicare insurance coverage. Such stories sought to identify MSMS as an organization interested in the well-being of the older residents, and as an organization sincerely interested in making the Medicare law work in Michigan.

County Society Rechartering: One of the outgrowths of the MSMS Centennial Session a year ago was a plan to recharter all the 55 component county medical societies. While only about one-fifth of the county societies participated, the rechartering ceremonies in those that did were effective public relations activities. Generally, one of the major officers of MSMS presented the new charter at a county medical society meeting and made pertinent comments about the next century of service by medicine to the residents of the state. It is understood that some counties plan to request their new charter during 1966-67.

1965 Community Health Week: Once again during the fall, MSMS cooperated in the AMA-sponsored Community Health Week, with valuable assistance from the Michigan Health Council and the Michigan Association of the Professions. While MSMS did carry out some state-wide projects that week, MSMS sought primarily to advise and assist county medical societies with their activities during that week. Some counties sponsored one major project, while others had a different activity each day. Major efforts by the county societies stressed career recruitment and hospital open house programs. One of the state-wide projects was a television program over WJIM-TV in Lansing, by the Michigan Association of the Professions, with Donovan Ward, MD, then Speaker of the AMA House of Delegates, as a participant.

Inter-Professional Liaison: Open avenues for communication and better understanding were maintained throughout the year with the Michigan Association of the Professions and the Michigan Health Council, and through the various MSMS liaison committees.

Founded by MSMS, the Michigan Association of the Professions continued to provide many opportunities for better understanding and joint planning. MSMS members continued to serve as officers. on the board of directors and in responsible positions. Many MSMS members attended the 1966 MAP Congress of the Professions in Detroit.

The Michigan Health Council coordinated the interests of all the health organizations in career recruitment, preventive health care and other matters. MSMS cooperated closely in this regard.

The Michigan Health Council MD Placement Service continued to help interested physicians find communities in which to practice, and in helping communities obtain more physicians.

Liaison with the Woman's Auxiliary and the Medical Assistants: The 1965 Centennial Session drew the two groups closer to MSMS with special activities, and cooperation was exceptional throughout the year. The woman's auxiliary units across the state did yeoman work manning the Healthmobile. The work of both groups was effective again on legislative matters.

Medi-Labels: Thousands of Medi-labels were distributed by MSMS to its members for placement on the new Michigan driver's license as a public-service educational project. The 1964 House of Delegates recommended that medical information, particularly about tetanus immunization, be placed on the new license. MSMS worked closely with the Secretary of State's office to develop an official medical sticker. The initial supply of 75,000 was distributed last fall and many reorders have been filled. Posters explaining the project were placed in the auto license offices, and many news articles were carried by the press, newspapers, radio and television.

1966 MSMS Officers Conference: A new attendance record was established this year in Detroit, February 25-26, when all but 15 of the 55 component county medical societies were represented. MSMS has thanked Wayne County Medical Society for making its headquarters facilities available for the workshop sessions, committee meetings and meal functions. The program dealt with Medicare, other legislative concerns and proven public relations projects for component societies.

Mass Media: Every week, MSMS provided news material to Michigan newspapers. Similar material is provided on a regular basis to Michigan radio and television stations.

Some of the material was in response to requests. Some of the story ideas originated with the many scientific committees. Many of the articles grew out of MSMS conferences, projects, etc.

The following segments of this report about the Conference on Medical News Reporting, about the MSMS Radio Series and about Television Programming touch on only a small portion of this ongoing staff work.

Conference on Medical News Reporting: MSMS and several allied groups joined to sponsor this one-day conference at Michigan State University for 60 editors, newspaper reporters, free-lance science writers, journalism professors and students and physicians. In response to requests from the writers ,the major subject-matter emphasis this year was on cancer-and-smoking. The conference not only identified MSMS as a leader in providing medical information for journalists but it also offered the excellent opportunity for county medical society leaders to come to the workshop with their local science writer, and several did.

Radio: MSMS provided an informative series of 15-minute radio tapes weekly to about 40 stations. A new series of 5-minute tapes was started this year and was well received by Michigan radio personalities, newscasters and disc jockeys. These services to radio stations were offered by the MSMS Committee on Scientific Radio and Television. Special subjects this year included medical manpower and medical education.

Television Programming: Throughout the year, MSMS provided physicians to participate in television programs offered by various stations. Often these were sponsored by the Michigan Association of the Professions, the Michigan Health Council and other organizations. Special MSMS appreciation is voiced to MAP for including physicians and medical topics often on its "Formula" program over

WJIM-TV in Lansing. An estimated 250,000 viewed the half-hour program each week. MSMS officials, committee chairmen and members with special knowledge appeared to discuss various health matters of interest to the general public. One of the programs featured the three medical school deans or their representative about "Formula for More Doctors."

Formula for More Doctors Film: During the height of the MSMS educational campaign about the proposed DO college, the Michigan Association of the Professions produced a half-hour television program over WJIM-TV, Lansing, about "Formula for More Doctors" with the deans or representatives of the three medical schools. Two prints of the film were obtained by MSMS and other television stations across the state carried the film as public service programming. The 28-minute, 16 mm films now are available for schools, clubs, etc.

Motion Pictures: In addition to the new film, "Formula for More Doctors," MSMS fills requests for films from schools, youth groups, farm organizations, civic clubs, PTA meetings, etc. Many of these films have been made available to MSMS through the Michigan Health Council and AMA. This is an ongoing valuable service of MSMS.

Visits by Senior Medical Students to MSMS: For the first time, invitations were extended to the senior medical students at the University of Michigan and Wayne State University to visit the MSMS headquarters. On two different days, the senior class officers and interested members from each school toured the MSMS building, and discussed MSMS services. The class officers were generous in their praise of the idea. MSMS staff members felt the project opened new avenues of communication with the seniors.

Distribution of MSMS Century of Service in Medicine: As a follow-up to the MSMS Centennial observance, the excellent history of MSMS by William J. Stapleton, Jr., MD, was offered to county medical societies as a public relations instrument. Component societies were requested to purchase copies of the MSMS Century of Service in Medicine and to present them to their local libraries, high schools, colleges, etc. Several did this and thus added an important historic document — with public relations values — to the students and adults in their communities.

Distribution of AMA Today's Health Guide: MSMS urged its component medical societies to purchase copies of the new Today's Health Guide from the AMA and distribute it to the local libraries, schools, newspaper, radio and television stations, youth-serving organizations, etc. Some counties did this.

Distribution of Pamphlets: Every day requests were filled by MSMS to provide informational pamphlets, booklets and brochures on medical subjects. Some requests came from school children working on health projects. Some requests were from ill persons seeking further information about some specific disease. Some requests came from organizations seeking material for an entire convention about some health matter.

Many of the printed pieces which were used were obtained from the AMA and from ancillary health organizations. Appreciation is voiced to the many cooperating organizations and agencies.

Thousands of pieces of authentic materials were thus distributed to add to the health knowledge of individuals and organizations.

The distribution of such material increased tremendously this year through the MSMS Healthmobile. Children, teachers, parents and others selected materials of special interest to them, with much, much interest in folders about careers in medicine and the health field.

Cooperation with PAK Campaign: MSMS urged its county medical societies and its members to cooperate with the Michigan State Pharmaceutical Association PAK Campaign during Poison Prevention Week in March. Such action was recommended in one of the resolutions adopted by the 1965 House of Delegates. A letter of appreciation was received from MSPA. Excellent liaison developed in the counties where co-sponsorship of the project was undertaken as a community service.

Representation at Conventions and Conferences: MSMS was represented at many conventions and conferences during the year when officers and staff members discussed various issues from the MSMS point of view. Invitations were carefully evaluated and preparations were carefully made. Such representation is a vital ongoing activity as MSMS constantly seeks to improve its liaison with other organizations.

MSMS often displays materials at such meetings to further tell about the work of the State Medical Society. One such exhibit, of special mention, was at the convention of the Michigan Nurses Association.

Closely allied to this phase of public relations work, MSMS prepared numerous magazine articles for the publication of various associations and institutions throughout the year.

Assistance to the Western Michigan Health Fair sponsored by the Muskegon County Medical Society and other organizations at Muskegon, May 2-7. The MSMS Healthmobile was one of the featured attractions.

MSMS Staff: During the past year, E. Ray Scott was transferred from the MSMS office at Detroit to Lansing to do full-time legislative work. The vacancy in the Detroit office was filled in May with the employment of Peter Hoheisel to carry out many MSMS public relations assignments.

In closing, the past year has been a very active one from a public relations point of view. The Public Relations Committee sponsored several new programs, continued other tested activities, and planned new thrusts for the upcoming fall months.

The Committee regularly corresponded with the county medical societies to suggest possible local projects and to offer assistance. The Committee welcomes ideas from the component societies and from individual members as it seeks to effectively carry out its responsibilities.

Addendum A.

HEALTHMOBILE'S JOURNEY TO DATE

Lansing	Oct. 15-22	Ingham
Flint	Oct. 22-29	Genesee
Pontiac	Oct. 29-Nov. 5	Oakland
Jackson	Nov. 5-12	Jackson
Battle Creek	Nov. 12-19	Calhoun
Coldwater	Nov. 19-26	Branch
Hastings	Nov. 26-Dec. 3	Barry
Ann Arbor	Jan. 17-22	Washtenaw
Adrian	Jan. 24-28	Lenawee
Detroit	Jan. 28-Feb. 4	Wayne
Mt. Clemens	Feb. 4-11	Macomb
Port Huron	Feb. 11-18	St. Clair
Marlette	Feb. 18-25	Sanilac
Southfield	Feb. 25-Mar. 4	Wayne County
Saginaw	March 4-11	Saginaw
Bay City	March 11-21	Bay-Arenac-Iosco
Mt. Pleasant	March 21-25	Gratiot-Isabella-Clare
Big Rapids	March 25-28	Mecosta-Osceola-Lake
Greenville	March 29-31	Ionia-Montcalm
Grand Rapids	April 1-8	Kent
Kalamazoo	April 8-15	Kalamazoo
Benton Harbor	April 15-22	Berrien
Holland	April 22-29	Ottawa
Muskegon	April 29-May 8	Muskegon
Wisconsin	May 10-12	Wis. State Med. Soc.
Ironwood	May 14-18	Gogebic
Houghton	May 19-25	Houghton-Baraga-Keweenaw
Marquette	May 25-June 1	Marquette-Alger
Escanaba	June 1-8	Delta-Schoolcraft
Menominee	June 8-15	Menominee
Iron Mountain	June 15-20	Dickinson-Iron
Sault Ste. Marie	June 20-25	Chippewa-Mackinac
Alpena	June 27-July 1	Alpena-Alcona-Presque Isle
Gaylord	July 1-8	North Central

THE REFERENCE COMMITTEE on Reports of Standing Committees, H. C. Tellman, MD, Chairman, accepted the report as published, with commendation for the active public relations program in the past year.

THE HOUSE adopted the report of the Reference Committee.

COMMITTEE ON RESPIRATORY DISEASES

R. A. RASMUSSEN, MD, *Chairman*

The Committee is charged with the responsibility of establishing communication with all organizations and agencies which develop information on respiratory diseases for the enlightenment of the medical profession and the public. It assists in the distribution of acceptable materials, and advises organizations and agencies on timely approaches to the various aspects of respiratory disease control. The Committee is concerned with the following diseases: pulmonary emphysema, chronic bronchitis and carcinoma of the lung and respiratory tract including possible causative agents such as the cigarette, tuberculosis, the pneumoconioses and other respiratory conditions leading to pulmonary insufficiency or pathology.

Pulmonary Tuberculosis. The Committee has made recommendations to publicize to physicians the valuable and helpful information contained in the various publications of the American Thoracic Society and urgently requests all physicians to acquaint themselves with the information contained in these publications. In addition, the Committee wishes to re-emphasize to the physicians in Michigan the fact that pulmonary tuberculosis is still an important disease in Michigan and recommends that all physicians be aware of this problem and that they make the tuberculin skin test a part of every routine examination.

Cigarettes. The Committee is deeply concerned over the continued use of cigarettes by young persons and recognizes the importance of renewed efforts in educating physicians and all persons, with special emphasis to young persons, of the health hazards of cigarette smoking. In the near future, the Committee will submit an item for publication in MICHIGAN MEDICINE containing the following:

(1) Certain paragraphs of the Surgeon General's Statement on Cigarette Smoking along with this Committee's endorsement;

(2) A special urge to all physicians to set a good example by not smoking;

(3) A request to all physicians to continue their efforts in telling all school children of the health hazards of cigarette smoking;

(4) A listing of very worthwhile material available on this subject, along with information as to where copies may be obtained, with a request to all physicians to obtain copies for distribution to youth in their local communities.

The listing of available material (plus a copy of each) will also be forwarded to all school libraries. The Committee realizes that this may be a duplication of effort but feels it important that such a mailing come directly from the physicians of Michigan.

The Committee has also requested The Council to set in motion additional efforts to educate the public of the health hazards of smoking, along the line of the warning now printed on all packages of cigarettes. Also, consideration should be given to some method whereby certain controls and limitations can be placed on all advertising of products injurious to health.

Definition of Respiratory Disability. The Committee has also requested that The Council refer to the Liaison Committee with the State Bar of Michigan the resolving of the difference between "legal" and "physical" disability and how it applies to a person's ability to work; also, to set up the criteria upon which the disability determination will be made. The Committee is concerned over this problem because many persons previously declared "disabled" by court action are now unable to get employment even though they have actually fully recovered from their disability and are capable of carrying on many jobs.

Liaison with Related Groups. The Committee will make contacts with other related groups in the autumn of 1966. The Committee is hopeful of good liaison with the Michigan Tuberculosis and Respiratory Disease Association, the Michigan Cancer Coordinating Committee, the Michigan Department of Public Health, the American Cancer Society, the American Medical Association, the Michigan Council on Smoking and Health, and the Federal Government Health, Education and Welfare Department.

Air Pollution. The Committee feels it is important that the physicians of Michigan publicly endorse reasonable efforts and scientific methods to control the major problems of air pollution in particular. Therefore, the following statement was drafted by the Committee and approved by The Council:

"The Michigan State Medical Society, through its Committee on Respiratory Diseases, endorses the principle of reasonable and scientific study directed toward the sensible control of the major problems of air pollution, whether this be the dusts or wastes of industry, the products of combustion of gasoline or oil (automobile) or the combustion products of home heating and burning equipment, or of smoking tobacco. All of these may have potential effect on man via the respiratory system and are therefore of concern to the physician, especially as they are known to affect health adversely.

"A similar stand is made by the Society in regard to water pollution."

THE REFERENCE COMMITTEE on Reports of Standing Committees, H. C. Tellman, MD, Chairman, recommended acceptance of this report as printed.

THE HOUSE adopted the report of the Reference Committee.

COMMITTEE ON RURAL MEDICAL SERVICE

R. E. RICE, MD, *Chairman*

On April 7, 1966, the Committee met at MSMS headquarters in East Lansing with members from other organizations that were interested in health career recruitment. In addition to members of the Committee that were present, there were also representatives from groups including Health Career Council of Calhoun County, Calhoun County Nurses Association, Health Career Chairman of the Woman's Auxiliary to MSMS, Health Career Co-ordinator, Michigan Department of Education, Health Educator of Wayne County Medical Health Department, John A. Doherty, Executive Director of the Michigan Health Council, Marceline Lyons, Administrative Assistant of the Michigan Health Council, and Ralph T. Wills, MSMS Staff Assistant.

A brief discussion was held concerning the status of the Family Practice Program at the University of Michigan. The discussion was limited due to lack of information as to the progress of this effort.

The Chairman distributed a report to those present concerning the 1966 National Conference on Rural Health in Colorado Springs on March 17, 18 and 19, 1966. The major points of emphasis from this conference were stressed but the details will not be included here as these are already on file in detail in a report to The Council.

John Doherty explained the workings of the placement service conducted by the Michigan Health Council. He noted that in the last four years the number of openings for general practitioners and specialists in the various parts of Michigan have doubled. The effectiveness of the placement service is shown by the fact that there are only eight communities in Michigan with populations of more than 1,000 that do not have a physician, and all of these communities have a physician within 12 miles. It was noted that recruitment of out-of-state physicians is somewhat hampered by our basic science law. It was a recommendation of the Committee that we continue to work for the repeal of the Basic Science Act.

Recruitment of students and others into health careers was discussed by Mr. Doherty and others present. Interesting community colleges in preparing people for work in health careers was felt to be a good answer to the health manpower shortage. The health industry now is the 3rd largest employer in the United States and by 1970 will be probably the number one employer in the country with over 8 million people involved.

Mr. Doherty and others reported on health career councils that are active in some parts of the state. These councils can be helpful in co-ordinating the activities of existing agencies and groups. Such activities as providing for speakers bureaus, finding sponsors for health career clubs in schools and committees on career days can be carried out by councils.

The curriculum in the public school systems might well include courses that will educate the students more specifically about the human body and thereby create more interest in entering the health field. High school counselors should be supplied with better information regarding health careers and steps taken to see that students can visit hospitals or other institutions related to health.

A source of manpower for practical nursing and other situations in the health field is present in the population in the form of mothers whose families may have grown up and they are now able to assume some duties in the health professions.

The Healthmobile exhibit has been traveling throughout the state and Wisconsin and has proved to be of tremendous interest in the communities in which it has appeared. By this mechanism, thousands of students have had an opportunity to learn a little more about the field of medicine and the allied health facts.

The medical college of Michigan State University, which is coming into being, was discussed and the Committee felt that Michigan State should be asked to try to develop its program so that it could produce physicians that would be interested in practicing in smaller communities.

During his attendance at the National Conference on Rural Health, the Chairman made a presentation at the evening program concerning what Michigan is doing in its attempts to improve the distribution of physicians in the state and its recruitment of medical manpower. He also served as a resource person to one of the discussion groups and made a report to the conference concerning their recommendations. The Chairman also has been asked to take part in the program during the AMA meeting in Chicago this June to discuss what the AMA and the states can do in the distribution of physicians.

The Committee wishes to express its appreciation for the interest that has been shown by The Council. We would also like to express our gratitude to the Michigan Health Council for the fine work that it continues to do, and to the other groups who have lent support in various ways. It is hoped that by such concerted effort we can continue to bring solutions to some of the problems that confront our profession.

THE REFERENCE COMMITTEE on Reports of Standing Committees, H. C. Tellman, MD, Chairman, recommended acceptance of this report as printed.

THE HOUSE adopted the report of the Reference Committee.

COMMITTEE ON SCIENTIFIC RADIO AND TELEVISION

G. H. Lowrey, MD, *Chairman*

The Committee continued both its series of 15-minute and 5-minute programs for Michigan radio stations.

One Committee meeting was held to review the 1965-66 experience and to plan for the coming year.

A major improvement in the project from the MSMS statewide concern is the new work by the Wayne State University School of Medicine. About one-half of the programs were produced at WSU with WSU professors and metropolitan area doctors on the programs. The other tapes were made at WUOM with medical educators from the University of Michigan Medical School and the Ann Arbor area.

All of the 5-minute tapes were produced at WUOM under the direction of John R. Gosling, MD.

The tapes were sent by WUOM each week to 30 stations within Michigan and several in Ohio and Wisconsin. Distribution of the better established 15-minute tapes is wider than the 5-minute tapes. There are indications that the 15-minute programs are scheduled for specific time slots by the stations with the 5-minute tapes used on an unscheduled basis during medical programs, variety segments, etc.

Both programs are available on a 52 week basis.

Several special subjects were covered this past year:

—Two programs dealt with the need for medical manpower and the plans of the three medical schools to expand class size.

—Several programs dealt with family planning, timely topics for conferences and study groups this year.

Efforts are being continued to work with the MSMS Committee on Medical Socio-Economics to produce several programs oriented primarily to the socio-economic aspects of medicine. The Committee also is advising the MSMS Public Relations Committee in its exploration of a possible series on non-scientific topics.

The Committee cooperated throughout the year by providing tapes for the Lapeer County Medical Society. The Lapeer Society purchases time from its radio station for a weekly program (the Lapeer station would not otherwise carry the MSMS-WUOM series).

The Committee is grateful to the physicians who have assisted us at a small honorarium, to WUOM and WSU for their technical production and distribution, and to the many cooperating radio stations for carrying medical-health information to the residents of Michigan.

THE REFERENCE COMMITTEE on Reports of Standing Committees, H. C. Tellman, MD, Chairman, recommended acceptance of this report as printed.

THE HOUSE adopted the report of the Reference Committee.

COMMITTEE ON VENEREAL DISEASE CONTROL

F. B. Bicknell, MD, *Chairman*

Review of Past Activity.—The Committee held one meeting on June 15, 1966 and thoroughly reviewed the minutes of the last meeting of the Committee (June 16, 1964):

1. The Committee recommended that the Wayne State University College of Medicine be requested to extend the course in venereal disease by two hours – another hour of lecture and one hour for the opportunity to see lesion cases.

2. The Committee felt it advisable to leave up to the individual hospital the decision as to whether or not to require routine STS. It was felt that in certain hospitals and clinics it may be important that this test be done.

3. The Council approved the Committee's recommendation to approve in principle the periodic mailing of the Treatment Schedule by the Michigan Department of Public Health to all licensed MDs and DOs in Michigan. The Schedule is concerned with the treatment of syphilis, gonorrhea, chancroid lymphogranuloma, venereum and granuloma inguinale.

Venereal Disease Educational Campaign. – It is the thinking of the Committee that many states have reached a plateau in infectious syphilis but that in Michigan the incidence of infectious syphilis is on the increase and the exact reason for this cannot be explained. The Committee feels it very important to do something to help physicians to recognize a case of venereal disease when they see it and to inform them on how to treat such cases and include venereal disease education in the teaching of residents and interns. The resolution, adopted by the MSMS Committee on Public Health, regarding the educational aspects of a campaign, and the action taken by the Committee on Public Relations, were in complete agreement with the Committee's thinking and received the wholehearted approval of those members present at the meeting. The Committee recommended to The Council that the Venereal Disease Educational Program, as proposed by the MSMS Committee on Public Relations, be put into effect immediately.

Future of Committee. — The "Purposes" of the Committee on Venereal Disease and its scope of activities were discussed, as well as the possibility of combining this Committee with another committee, and the members present felt that the Committee on Venereal Disease should be continued and that more meetings should be held.

THE REFERENCE COMMITTEE on Reports of Standing Committees, H. C. Tellman, MD, Chairman, recommended acceptance of this report as printed.

THE HOUSE adopted the report of the Reference Committee.

17. Reports of House of Delegates Committees

COMMITTEE ON CERTIFICATES OF COMMENDATION

ARNOLD L. BROWN, MD, *Chairman*

The MSMS House of Delegates established the "MSMS Certificates of Commendation" at its 1961 session. The Delegates instructed that the awards "may include both scientific and/or public service, and may be awarded to one or several physicians annually who distinguish themselves in the medical profession."

The 1962 House of Delegates presented the first such "Certificates of Commendation" to four distinguished Michigan doctors of medicine who had been recommended by the House of Delegates Committee. The first four honorees were Jerome W. Conn, MD, Ann Arbor; G. D. Cummings, MD, Lansing; Charles S. Kennedy, MD, Detroit; and Robert L. Novy, MD, Detroit.

In 1963, the House of Delegates approved the report of the Committee and presented Certificates to Forest D. Dodrill, MD, Bloomfield Hills; Charles J. Jentgen, MD, Detroit; John M. Sheldon, MD, Ann Arbor, and Homer H. Stryker, MD, Kalamazoo.

The 1964 House of Delegates acted to present the Certificates to Goldie B. Corneliuson, MD, Lansing; John S. DeTar, MD, Milan; Robert Heavenrich, MD, Saginaw; Norman F. Miller, MD, Ann Arbor; E. Gifford Upjohn, MD, Kalamazoo, and Orus R. Yoder, MD, Ypsilanti.

In 1965, the House of Delegates approved Certificates to Fred J. Hodges, MD, Ann Arbor; Traian Leucutia, MD, Detroit; and Remus J. Robinson, MD, Detroit.

The Committee this year again invited every component county medical society to nominate one or more possible candidates. This year the Committee had more nominees than any of the previous years. In its deliberations, the Committee considered 14 Michigan physicians, nominated either by their county medical society or by members of the Committee. The accomplishments of each were carefully reviewed.

The Committee is proud to present for consideration by the 1966 House of Delegates the names of seven distinguished Michigan doctors of medicine for Certificates of Commendation. They are alphabetically: Arthur C. Curtis, MD, Ann Arbor; Lionel L. Davis, MD, Mt. Pleasant; Mark Marshall, MD, Ann Arbor; Harold J. Meier, MD, Coldwater; Ralph H. Pino, MD, Detroit; Alfred B. Swanson, MD, Grand Rapids; Harry A. Towsley, MD, Ann Arbor.

Brief biographic information about each nominee follows:

Arthur Covel Curtis, M.D.

Dermatology and Syphilology, Internal Medicine, Ann Arbor; Born, Binghamton, N. Y., June 30, 1898; B.S. (1923) and MD (1925) degrees, University of Michigan. Associate Professor, Internal Medicine, and Professor and Chairman, Department of Dermatology, University of Michigan; Assistant Dean (1928) and Secretary (1931-35), University of Michigan Medical School; Past President of Society for Investigative Dermatology, American Academy of Dermatology and Syphilology; Detroit Dermatological Society, American Board of Dermatology, Central Society for Clinical Research, AMA Section on Dermatology, Association of Professors of Dermatology; president of Diplomate, American Board of Internal Medicine and Board of Dermatology and Syphilology; associate editor, Journal of Investigative Dermatology; dermatology editor, American Lecture Series; trustee and director, American Social Health Association; Fellow, American Society for Clinical Investigation, American College of Physicians, American Association for the Advance of Science, American Academy of Dermatology and Syphilology, American Dermatological Association; and member of many scientific organizations.

Lionel L. Davis, M.D.

General Practice, General Surgery, Mt. Pleasant; Born, Mt. Pleasant, September 2, 1905; attended Central Michigan University; A.B. (1929) and M.D. (1930) degrees University of Michigan; Affiliated with Central Michigan Community Hospital; Past president, vice president, and secretary-treasurer, Gratiot-Isabella-Clare County Medical Society; Chairman, Mackenzie Foundation Board (trust fund for hospital building); member, Phi Chi; Chamber of Commerce, State Task Force on Health Unit Study; instrumental in establishing Mt. Pleasant Community Hospital, leader in realization of Isabella County Medical Care Facility, involved in planning for future community health needs.

Mark Marshall, M.D.

Internal Medicine, Ann Arbor (retired); Born, Economy, Indiana, February 15, 1880; B.S. degree (1902), Earlham College; M.D. degree (1908), University of Michigan; postgraduate study in zoology, University of Michigan (1902-03); instructor, Materia Medica and Therapeutics, Assistant Professor, Internal Medicine, University of Michigan; Fellow, American College of Physicians; Diplomate, American Board of Internal Medicine; charter member and local founder, Alpha Omega Alpha; member, Sigma Si, Michigan Trudeau Society, Junior Research Club of the University of Michigan; associated many years at St. Joseph Mercy Hospital; an annual Mark Marshall lectureship at St. Joseph Mercy Hospital has been established in Doctor Marshall's honor.

Harold J. Meier, M.D.

Surgery of Trauma, Coldwater; Born, Grand Rapids, July 19, 1904; pre-medical education and MD degree (1929), University of Michigan; postgraduate study in basic sciences and fracturecare; Major, U.S. Army (1942-45); affiliated with Coldwater Community Hospital (former chief of staff and chief of surgery), State Home and Training School (orthopedic consultant), Memorial and Community (courtesy staff, orthopedic consultant) Hospitals; former MSMS Councilor and Council chairman; past president, Branch County Medical Society; member, American Fracture Association, Alpha Omega Alpha and Phi Beta Pi; board member, finance chairman, local Theatre Foundation and Arts Council.

Ralph H. Pino, M.D.

Ophthalmology, Detroit; Born, Maple Rapids, July 4, 1888; pre-medical education, Ferris Institute; MD degree (1916), University of Illinois; Presidential Selective Service Medal for voluntary work in the Selective Service System, World Wars I and II; Professor Emeritus, Ophthalmology, Wayne State University College of Medicine; Medical Director, Sight-Saving and Braille in the Detroit Public School System; founder, Remedial Reading Program, Wayne State University; Past President, Wayne County Medical Society, Detroit Ophthalmological Club, Detroit Ophthalmological Society; Fellow, American College of Surgeons; member, American Academy of Ophthalmology and Otolaryngology, American Public Health Association, Michigan Public Health Association; recipient, American Academy of Ophthalmology and Otolaryngology Award of Merit and Honor Key (1956), Honorary Doctor of Science degree, Ferris State College (1958); Member, Governor Romney's Citizens Committee on Higher Education (1963-65); one of the founders and member, first board of Directors of Michigan Blue Shield.

Alfred B. Swanson, M.D.

Orthopedic Surgery, Grand Rapids; Born, Kenosha, Wisconsin, April 16, 1923; B.S. (1943) and MD (1947) degrees, University of Illinois; Captain, U.S. Army Medical Corps, 1952-54; Affiliated with Blodgett, St. Mary's, Sunshine, and Mary Free Bed Hospitals: member, American Academy of Orthopedic Surgeons, Nu Sigma Nu, Chamber of Commerce, Rotary International; Doctor Swanson has made three trips at his own expense to Viet Nam since 1962 to participate in teaching and medical-surgical care programs. He has done much toward establishing a polio immunization program in Viet Nam, and during the past year he was instrumental in bringing a South Vietnamese physician to the United States for further study and a tour of medical facilities throughout the nation.

Harry A. Towsley, M.D.

Pediatrics, Ann Arbor; Born, Midland, September 15, 1905; pre-medical education, Kalamazoo College, Michigan State College, University of Michigan; MD degree (1931), University of Michigan; postgraduate study, Chicago, Boston, Cornell, St. Louis, in England at Birmingham and London; U.S. Army (1942-45), Chief, Division of Communicable Diseases (1942-44), Chief, Laboratory Service (1944-45); Professor, Department of Pediatrics and Infectious Diseases. Associate Director, Department of Postgraduate Medicine, faculty member since 1935, University of Michigan; Diplomate, American Board of Pediatrics; President (1964-65), American Academy of Pediatrics; Director, Michigan Association for Retarded Children; Vice-President, Michigan United Fund. Member, Ann Arbor Board of Health, Michigan Health Council, Chamber of Commerce, Alumni Advisory Board of Galen Honorary Medical Society, Board of Directors of University of Michigan Alumni Association; Chairman, MSMS Committee on Postgraduate Medical Education, Chairman several years of MSMS Annual Session Scientific Program Committee.

THE REFERENCE COMMITTEE on Special Committees, James C. Danforth, MD, Chairman, approved the selection of the candidates and made the following recommendations:

1. That future nominations include a brief summary of the reasons why the individual was selected.

2. That this Committee on Certificates of Commendation be a continuing one. Part of the difficulty was the narrowing down of the fourteen candidates. They had to be narrowed down to seven. Some of the remaining seven will undoubtedly come up for commendation a little later, and we felt there should be some continuity on this Committee.

3. That consideration be given university-based physicians and practicing physicians alike.

4. Candidates selected by county component chapters should not be publicized until announced officially by the Committee on Certificates of Commendation. Sometimes the news leaks out, and if it is unauthorized it could become a little embarrassing.

THE HOUSE adopted the report of the Reference Committee.

COMMITTEE ON CONSTITUTION AND BYLAWS

C. J. France, MD, *Chairman*

While the Committee conducted only two meetings, on June 7 and August 2, 1966, the importance of this House of Delegates Committee and the work done by this Committee is evident in this annual report.

After careful deliberation, the Committee recommends the following actions to the 1966 House of Delegates.

1. Change of name of Committee on Highway Accident Prevention to Committee on Highway Injury — "That subdivision (c) of Section 1 of Chapter 12 of the Bylaws be amended by striking out the words 'Committee on Highway Accident Prevention, and substituting therefor the words 'Committee on Highway Injury'."

2. Implementation of medical staff surveys of hospitals — "That, inasmuch as this matter will be brought before the House of Delegates in The Council's report and until the House of Delegates acts on this proposal, this matter is not in the area of responsibility of this Committee."

3. Scientific Committees — "That a review be made by The Council of the necessity for continuation of scientific committee to determine the possibility of combining or eliminating those committees that have not been active in the past few years." Informational data previously compiled by the staff secretary of this Committee is available to The Council.

4. Structure of Advisory Committee to the Executive Director — "That Section 3 of Chapter 10 of the Bylaws be amended by striking out subdivision (d) thereof and substituting therefor the following:

> "(d) The Advisory Committee to the Executive Director shall consist of the President, the President-Elect, the Speaker of the House of Delegates, the Chairman of The Council, the Chairman of the Finance Committee, the Treasurer and the Secretary. The Chairman of The Council shall be Chairman of the Committee. The duties of the Committee shall be to advise and counsel with the Executive Director and to report to The Council concerning matters of administration and personnel."

5. Assistant Treasurer and Assistant Secretary — "That the adoption of the following two amendments to the Constitution be recommended:

> "Amend Section 1 of Article IX of the Constitution by inserting immediately following the semicolon after the word 'Treasurer' the words 'an Assistant Treasurer'; and by inserting immediately following the semicolon after the word 'Secretary' the words 'an Assistant Secretary';
>
> "Amend Section 3 of Article IX of the Constitution by striking out from the last sentence thereof the words 'The Secretary and the Treasurer' and substituting therefor the words 'The Secretary, Assistant Secretary, Treasurer and Assistant Treasurer.'

"Further, to submit *as information* to the House of Delegates the following three amendments to the Bylaws to implement the Constitutional changes immediately above. The Committee recognizes that these amendments to the Bylaws cannot be adopted at this year's Session and that a layover of one year is necessary, pending adoption of the Constitutional amendments.

> "Amend Section 12 of Chapter 9 of the Bylaws by striking out the words 'Secretary and Treasurer' from the first sentence thereof and substituting therefor the words 'Secretary, Assistant Secretary, Treasurer and Assistant Treasurer.'
>
> "Amend Chapter 13 of the Bylaws by renumbering the present Section 7 as Section 8, the present Section 8 as Section 9, the present Section 9 as Section 10, the present Section 10 as Section 11, and by adding a new Section 7 to read as follows:
>
> > "Sec. 7 *Assistant Treasurer and Assistant Secretary* — The Assistant Treasurer shall perform such duties of the Treasurer and the Assistant Secretary shall perform such duties of the Secretary as shall be directed by The Council. The Council may require either or both to be bonded in amount fixed by The Council, the cost thereof to be paid by the Society.
>
> "Amend Section 1 of Chapter 10 of the Bylaws by striking out the words 'Secretary, a Treasurer' from the second sentence thereof and substituting therefor the words 'Secretary, an Assistant Secretary, a Treasurer and an Assistant Treasurer.'"

6. Judicial Commission — "That the House of Delegates approve the following amendment:

> "Amend Chapter 11 of the Bylaws by striking out Section 1 thereof and substituting the following:
>
> > "Sec. 1 *Composition — Qualification* — The Judicial Commission shall be composed of ten members, each

> of whom shall be a voting member of the Society in good standing. No member of the Judicial Commission shall, during his tenure of office, hold any of the following offices or positions: Speaker or Vice-Speaker of the House of Delegates of this Society, Councilor of this Society, member of an ethics, grievance or mediation committee or member of the governing board of his component society."

7. Committee on Michigan Medical History — "That a Committee on Michigan Medical History become a standing committee of the Society by amending the Bylaws as follows:

> "Amend Section 1 of Chapter 12 of the Bylaws by adding a subdivision (j) to read as follows:
>
> "(j) The Committee on Michigan Medical History shall consist of a chairman and not more than seven members including the Historian of the Society and at least one professor who teaches medical history in a Michigan medical school. It shall be the duty of the Committee to assist the Historian in summarizing and preserving Centennial and other historical materials, to explore and make recommendations with respect to historical projects, to encourage and assist component county societies in projects in the field of medical history and to assist the Publication Committee in the dissemination of historical materials."

8. Eighth delegate to the American Medical Association — "That the following amendment to the Bylaws be recommended:

> "Amend Section 11 of Chapter 9 of the Bylaws by adding a paragraph to read:
>
> "Should the Society become entitled to one or more additional delegates subsequent to the annual session of the House of Delegates in any year, such additional delegate or delegates shall be designated and accredited by The Council to serve until the next annual session. In filling such offices, alternate delegates shall be designated in order of their seniority as defined in this Section."

The Chairman takes this opportunity to thank the members of the Committee, Legal Counsel and MSMS staff for their fine and diligent work.

THE REFERENCE COMMITTEE on Constitution and Bylaws, James D. Fryfogle, MD, Chairman, made the following recommendations regarding the eight items contained in the Annual Report of the Committee on Constitution and Bylaws:

Item 1. Change of name of Committee on Highway Accident Prevention to Committee on Highway Injury. The Reference Committee recommended approval.

Item 2. Implementation of Medical Staff Surveys. The Reference Committee concurred in the Committee's recommendation of no action, since this matter will be acted upon by the House through other reports.

Item 3. Scientific Committees. The Reference Committee recommended approval.

Item 4. Structure of Advisory Committee. The Reference Committee recommended approval.

Item 5. Assistant Treasurer and Assistant Secretary. The Reference Committee stated that since this required an amendment to both the Constitution and the Bylaws, both would have to lay over until the 1967 Session of the House of Delegates.

Item 6. Judicial Commission. The Reference Committee recommended approval.

Item 7. Committee on Michigan Medical History. The Reference Committee recommended approval.

Item 8. Eighth Delegate to the AMA. The Reference Committee recommended approval.

THE HOUSE adopted the report of the Reference Committee. Subsequently, however, Parliamentarian H. M. Golden, MD, noted that Bylaws changes must be presented at one meeting of the House and laid over for one meeting before being acted upon. In the Parliamentarian's opinion, this had not been done in the case of the Annual Report of the Constitution and Bylaws Committee just acted upon by the House. Although there was no question of parliamentary procedure, but rather of interpretation of the existing Bylaws, the Speaker ruled that the report would be laid over until the next regular meeting of the House.

COMMITTEE TO DETERMINE MONETARY VALUE OF UNIT OF RELATIVE VALUE SCALE

Ross V. Taylor, MD, *Chairman*

The Committee on Governmental Medical Care Plans needed a conversion factor for the 1965 Michigan Relative Value Study before it could represent MSMS in negotiations with the fiscal agent for Medicare in Michigan (Michigan Medical Service). The House of Delegates Committee to Determine Monetary Value of Unit of Relative Value Scale, after deliberations which included an analysis of current income levels of Michigan families and changes in the Consumer Price Index from 1957 through 1965, presented the following statement and recommendations to The Council:

> "All indications are that there will be an expanding role of government in responsibility for medical care. The governmental programs, of necessity, must soon offer only one scope of benefits and one standard of care, and ultimately this means only one fee schedule for providers of service. It, therefore, seems essential that any fee schedule be appropriate not only to the patient and responsible agency, but also to the physicians, and with the consideration that it is very likely that, in the near future, all physician income may be derived from one such fee schedule. This means that the terms 'usual and customary fee' or prevailing fee' necessitate a fee that would be fair to all concerned, and as if every physician's entire income were to be derived from providing services under the single fee schedule. Such a schedule should therefore be one appropriate to the mean or average family income group in Michigan.
>
> "The medical profession can no longer afford to subsidize a part of the population, since the profession will no longer be able to regain this subsidy from any other segment of the population.
>
> "With the foregoing facts and principles in mind, the Committee acted as follows:
>
> "Recommendation One: That the Michigan State Medical Society adopt a policy that fee schedule(s) for all governmental programs be based on the premise that such schedule(s) be fair, both to the responsible agency and to the physician provider of services, and based on the premise that the physician's entire income may become dependent on such a fee schedule(s); carried.
>
> "Recommendation Two: That the monetary conversion factor for the 1965 RVS of the Michigan State Medical Society be established at $5.00 (five dollars) for this year; carried.
>
> "Recommendation Three: That the monetary conversion factor for any approved RVS of the Michigan State Medical Society be subject to review and re-determination at annual intervals by the Michigan State Medical Society; carried.
>
> "Recommendation Four: That the 'House of Delegates Committee to Determine Monetary Value of Unit of Relative Value Scale' be made a *standing* committee of the House of Delegates, and with appointees selected as in the Resolution approved by the MSMS House of Delegates in September, 1965; carried."

The Council approved this statement and the Committee's recommendations at its March meeting.

THE REFERENCE COMMITTEE on Medical Service and Prepayment Insurance, James B. Blodgett, MD, Chairman, amended Recommendation Two to read, "That the monetary conversion factor for 1965 Relative Value Scale of the MSMS be established at not less than $5 and be considered only as a guideline for payment by fiscal agents and not as a fee schedule", and recommended approval of the report as amended.

THE HOUSE adopted the report of the Reference Committee.

COMMITTEE ON REAPPORTIONMENT

P. K. STEVENS, MD, *Chairman*

Pursuant to the passage of Resolution No. 21, as amended, by the 1965 MSMS House of Delegates, the Speaker appointed this ad hoc Committee and charged it with making a study to determine the possibility and practicability of reapportioning the MSMS House of Delegates, Council, and delegation to the American Medical Association on a "one man — one vote" basis.

There are many complex considerations to be thoroughly evaluated prior to recommending to the House of Delegates that such a change in basis of representation is, or is not, feasible. A great deal of data has been prepared and furnished to all members of the ad hoc Committee, including analyses of member-delegate ratios, councilor districts as related to both physician population and the composition of the House of Delegates, and geographical distribution of AMA Delegates and Alternate Delegates. A preliminary evaluation of these data shows that the members of the Committee are not yet ready to formulate a recommendation.

It is therefore respectfully recommended that the 1966 House of Delegates empower and instruct its Speaker to reappoint the Committee so that it may continue its study and render its final report to the 1967 MSMS House of Delegates.

THE REFERENCE COMMITTEE on Reports of Special Committees, James C. Danforth, MD, Chairman, received this report as an interim report.

THE HOUSE adopted the report of the Reference Committee.

COMMITTEE TO SELECT MICHIGAN'S OUTSTANDING PHYSICIAN

CONRAD R. LAM, MD, *Chairman*

The 1964 House of Delegates took action "to establish annual recognition of Michigan's Outstanding Physician." The resolution outlined this award "as an annual recognition of a member of the profession, who is not necessarily a family physician, nor one advanced in years." The Delegates also adopted the report of the reference committee which instructed "that the Speaker annually appoint an ad hoc committee to make the selection from nominations submitted by component medical societies."

The 1965 House of Delegates approved the recommendation of the first committee and presented this new MSMS award to Franklin L. Troost, MD, of Holt, for 1964-65.

The 1965-66 Committee received nominations from five component county medical societies. Each of the nominees has an outstanding record as a physician and a community leader. The Committee diligently studied the accomplishments and contributions of each man and reached the following decision at its Committee meeting on July 7, 1966: The Committee recommends the name of William A. Hyland, MD, Grand Rapids, to the House of Delegates as "Michigan's Outstanding Physician for 1965-1966."

A brief biography follows:

Born April 26, 1892, in Grand Rapids; AB degree, and MD degree, 1914, from Georgetown University; interned at Georgetown University Hospital and Inspital, Berne, Switzerland; was resident at UBA and Blodgett Hospital, Inspital, Berne and Beaujon Hospital, Paris, France; began practice in surgery at Grand Rapids in 1915 and continued his practice there until his death, July 18, 1966.

Doctor Hyland served as a Major, US Army Medical Corps, World War I, and as Consultant and Advisor, Medical Officers, Division of Selective Service, Michigan Department, World War II.

Professional organizations in which Doctor Hyland held membership are: Alpha Omega Alpha and Phi Beta Pi, Central Surgical Association, American College of Surgeons, American Goiter Society, American Medical Association, and American Society of Abdominal Surgeons. Civic groups include the Chamber of Commerce, Rotary Club, and veterans organizations. He was a Community Chest Officer, a Director of the Michigan National Bank, and a member of the Board of Governors, Georgetown University.

A dedicated leader in the Michigan State Medical Society, Doctor Hyland served in the following capacities: MSMS Delegate to the American Medical Association, Chairman of the MSMS Delegation to the AMA, Michigan Chairman of the US Committee of the World Medical Association, charter member of Blue Shield of Michigan, and Chairman of the MSMS Cancer Committee. Doctor Hyland was a Past President of both MSMS and of the Kent County Medical Society; and at the time of his death, was treasurer of MSMS.

Doctor Hyland had served as Chairman of the AMA Communications Committee, Chairman of the Special Committee of the AMA House of Delegates to Evaluate the Heller Report for Reorganization of the AMA, and Chairman of the AMA Constitution and Bylaws Committee.

Outstanding for his work on the behalf of cancer, Doctor Hyland had been a member of the American Cancer Society's Executive Committee, Michigan Division; Chairman of the Research Committee; a member of the National Board of Directors; member of the Service Committee of the National Board; and member of the Regional Board of District 5. In 1953, Doctor Hyland received the Tiffany Award given by the American Cancer Society. In addition, Doctor Hyland was a member of the Cancer Committee of the American College of Surgeons and the Kent County Medical Society Cancer Committee.

Doctor Hyland was extramural lecturer in surgery at the University of Michigan and visiting lecturer in surgery at Georgetown University. His hospital affiliations were with Blodgett Memorial, Butterworth, and St. Mary's Hospitals, Grand Rapids; Municipal Hospital, Grand Haven; and Central Michigan Community Hospital, Mt. Pleasant, where he served as consultant and attending surgeon.

THE HOUSE, acting as a committee of the whole, approved this report.

COMMITTEE TO STUDY FINANCIAL STRUCTURE OF MSMS

JAMES D. FRYFOGLE, MD, *Chairman*

In 1955 this House of Delegates authorized the creation of an ad hoc Committee to Study the Financial Structure of MSMS for the express purpose of making a recommendation to the 1956 House of Delegates regarding the necessity for an increase in dues.

Following a definitive study of all financial conditions and management policies the Committee in 1956 did recommend a dues increase to protect the MSMS "reserve, offset higher costs, permit a continuation of program at its current level, and adequately reimburse part-time officers, key full-time staff and others."

At regular intervals this Committee has been asked to review the MSMS financial structure, reporting in 1960 and 1963.

The 1966 Committee defined its responsibility that it must: 1) review all aspects of the financial structure of MSMS, 2) determine that monies are efficiently administered and 3) assure itself that funds are adequate for the job to be done. The Committee decided not to comment on the worth and value of projects or activities since these are annually reviewed by the House through reports from The Council and committees.

In brief, the Committee's methodology of study was to assign various aspects of the overall review to individual members of the Committee with reports for full Committee consideration. It also held meetings with Finance Chairman Robert K. Whiteley, MD, President-Elect C. Allen Payne, MD, Secretary O. B. McGillicuddy, MD, and key members of the staff.

Data generated by our study will be found in the addenda to this annual report.

1. *Financial Management Procedures.* The Committee reviewed the financial management procedures — specifically, budget development and expenditure control for each of the past three years. It extends its compliments to The Council and management for the significant steps taken to modernize and improve the procedures for budget development, the provisions for accountability for expenditures, the monthly review and expenditure control by The Council and staff, and the improvement in the clarity and understandability of the detailed monthly, financial reports.

Development of this process began in 1965 by joint action of the management staff and the accounting firm of Alexander Grant and Company of Detroit. Under Council supervision, the new procedures were developed and finally adopted for implementation in the MSMS 1966 fiscal year.

The Committee felt a brief review of the new system would be of interest to the Delegates.

Budget requests are received by the Budget Development Committee, which creates a proposed budget for the review and consideration of The Council's Finance Committee. The proposed budget is further refined by the Finance Committee, reviewing each department or committee request for funds, and submitting a recommended budget for adoption by the full Council.

The budget is subdivided into thirteen expense centers. The staff person responsible for each expense center is held accountable for expenditures to the Finance Committee. Each month, in its detailed financial report, The Council receives a progress report on income and expense for each center, measured against the budget. Flexibility is built into the system in that the budget can be amended by the Finance Committee and The Council, either increasing or decreasing authorized expenditures, at any time. In practice a quarterly review has been sufficient.

Suitable and necessary amendments to the accounting procedures have been incorporated and a dictionary of accounts developed whereby all types of expenses are coded and thoroughly described to facilitate reporting.

The success of the new system is evidenced by the fact that the 1966 budget at the end of a six-month period was amended only 1.2 per cent. This testifies to the efficiency of the control system and the accuracy of the budgetary predictions.

The Committee concludes that the new system is efficient and more than adequately meets the financial control needs of MSMS. The Committee recommends that The Council and the management staff be commended for the institution of this new system.

2. *Tax-exempt status.* For several years, MSMS has reviewed its tax-exempt status with Legal Counsel, assuring that it operates within Internal Revenue Service guidelines.

However, new IRS rules are continually being made, and MSMS regularly consults with tax experts, who in conjunction with Legal Counsel, keep The Council abreast of changes.

3. *Income and Expense.* The Committee has made a detailed analysis of the income and expense of MSMS for 1963, 1964, 1965 and 1966 (projected). The gross figures appear in Exhibit A.

These figures reflect the financial impact of the Michigan Clinical Institute which was held only in 1963 and 1964 of our study period. The MSMS discontinued the MCI beginning in 1965.

Although it is difficult to compare these figures because of the unusual expenditures of the Centennial celebration and the variation of exhibit sales (due to change of location between Grand Rapids and Detroit) and the fluctuation in Journal advertising sales, it is evident that MSMS is operating within its income except for the Centennial year. However, inflationary pressures may well limit our activities in the future.

Any new programs proposed by the House of Delegates or The Council will have to be financed by increased dues. For the experiences of other states see Exhibit B.

3-A. *Sources of Income.* MSMS has four major sources of income—member dues, grants, exhibit sales and journal advertising and reprint sales. (See Exhibit C)

Normal membership growth is reflected in a 2% increase in dues income. For 1966, MSMS dues were increased $10.00.

Dues income for 1963 was $481,385; for 1964 was $490,769; for 1965 was $501,369 and for 1966 (projected) is $558,000.

Grants for special activities or projects also have increased during the study period.

In 1963, grants totaled 0; in 1964 $1,700; in 1965 $14,035; in 1966 (projected) $16,255.

Exhibit sales fluctuate depending upon the site of the Annual Session.

1963 (Grand Rapids)	$30,649
1964 (Detroit)	$25,891
1965 (Detroit)	$45,312
1966 (Grand Rapids)	$29,000 (projected)

Advertising and reprint sales have decreased but appear now to be stabilizing.

1963	$72,624
1964	$60,954
1965	$59,509
1966	$58,000 (projected)

3-B. *Expenses.* Like all businesses and associations, the cost of doing business has gone up since 1963, particularly in the single year 1966.

A broad indicator of this increase is the BLS wholesale price index which (using the 1957-59 base period) stood at 100.3 in December, 1963, and had risen to 105.7 by June, 1966. In specific instances prices tend to pyramid from wholesale to ultimate buyer. These increases reflect in the cost of equipment, supplies and services used in daily MSMS operations. For example, office supplies have increased in cost 10-15% on a per unit basis. Contracted printing costs have increased 10% since 1963. Window-washing services rose 12% since 1963. Bulk mail rates have climbed 20% since 1960. Property taxes have increased from $14,000 to $16,000 since 1963. Part-time secretarial hourly wage rates have increased 14% and competitive clerical wage rates have increased 16.8% since 1963.

The Council and management have taken major steps to hold costs to the most reasonable levels. Two examples: 1) Use of part-time secretarial help for peak work periods to minimize the number of full time clerical staff and resulting supplemental benefit costs, 2) Installation of labor-saving and speed production equipment to perform more efficiently.

4. *Reserves and Short-term indebtedness.* MSMS has slowly built up a reserve fund which in 1966 amounts to $111,640 (See Exhibit D- Balance Sheet)—The equivalent of about two months operation expense.

A substantial portion of this reserve is needed for capital funding or depreciation reserve.

The Council believes this reserve should be increased at a modest rate over the years. Many organizations feel they should have reserves equal to six months of their budget.

On July 1, 1966, MSMS had no outstanding notes. However, as in the past, it will be necessary to reborrow during the closing months of the year. Repayment will be made in the early months of 1967 when dues income is high.

At the end of fiscal 1961 outstanding notes totaled $200,000

At the end of fiscal 1962 outstanding notes totaled $150,000

At the end of fiscal 1963 outstanding notes totaled $125,000

At the end of fiscal 1964 outstanding notes totaled $100,000

At the end of fiscal 1965 outstanding notes totaled $170,000

Due to the unusual expenses incurred during the celebration of the MSMS Centennial, the short term indebtedness was not decreased in 1965. It is anticipated that at the end of fiscal 1966, short term notes will not exceed $150,000.

5. *Increased Activities — 1966.* The Committee recognizes that The Council is under two great pressures: 1) the upward trend of prices and costs and, 2) the necessity of expanded and intensified MSMS activities and services.

The 1965 House of Delegates increased MSMS dues by $10 per year for the purpose of:

"1) Liaison with governmental agencies in the implementation of Medicare;

"2) Improved legislative contact with the State Legislature;

"3) Increased community relations activity."

MSMS activities in the areas of community and public relations, legislative action and governmental medicine were considerably increased.

The Council authorized extensive use of the Healthmobile (first shown to MSMS members at the Centennial Session) in connection with re-chartering ceremonies of component societies. More than 80,000 children and adults have passed through the Healthmobile's exhibits. (See Healthmobile report in Relations Section of the Annual Report.)

In the area of governmental medical care programs, The Council employed Mr. Herbert Mehler to staff the new committee created by House of Delegates resolution. (See Report of Governmental Medical Care Programs Committee.) This Committee has been responsible for negotiating with various governmental agencies re fee schedules, improving contract terms and reporting to the membership re Medicare Title XVIII and Title XIX rules and regulations.

The MSMS public relations effort was strengthened by revisions in the Detroit regional office. Mr. E. Ray Scott was transferred to Lansing as legislative assistant. A new PR assistant was retained for the regional office, Mr. Peter Hoheisel.

In the legislative area, following Mr. Scott's resignation in mid-year, The Council is in the process of employing a legislative assistant to bring this full-time legislative staff up to the full complement of two.

The necessary secretarial assistance to the new employees also has been provided. Thus, The Council believes it has effectively utilized the increased dues income to enhance the MSMS effort and effectiveness in the areas of public and community relations, legislative activity and governmental medical care.

6. *Personnel.* The committee also reviewed the duties and functions of the MSMS staff. (see Exhibit E).

MSMS personnel, including Legal Counsel, Scientific Editor and Economic Consultant, total 24. This compares to a staff of 25 in 1963. MSMS management has made every effort to keep full-time staff at a minimum, and utilize temporary office personnel during peak work periods.

MSMS personnel policies were also reviewed. The Committee believed these were well directed and evidenced good management practices.

Salaries of personnel were reviewed and compared with similar positions in other fields. MSMS wage scales and job descriptions for clerical employees were also studied. For senior staff, the method of recommending salary increases according to a combination of performance and assignment factors was studied.

We have lost personnel who have changed jobs for better salaries and find it impossible to replace them in the same salary scale. Continuing review of the salary scale is essential.

7. *Conclusions.* After detailed review of the MSMS financial management for the years 1963, 1964 and 1965, the Committee feels that the money from all sources has been efficiently administered for the benefit of the Society.

The current cost of doing business poses many financial difficulties. We must maintain our many programs and anticipate future needs, keep our organization, house and staff in order, reduce our short-term debt, continue to build a reserve and capitalization fund and be alert to possible changes in tax status.

These problems have been adequately handled during the three years we have reviewed. However, as we look at the immediate future, if our full function as a professional society is to be carried on, more monies will be

EXHIBIT C

INCOME OTHER THAN DUES

	1963	1964	1965	1966 ESTIMATE	Trends
Rent & Misc. Sales	4,911.52	4,330.06	*7,129.26	4,900.00	Should hold around $5,000 annually
Grants			**1,000.00	16,000.00	$10,000 received in 1966 for Healthmobile
Interest on invested funds	2,551.75	2,813.69	3,871.00	4,000.00	Income should match estimate
Annual Session Exhibits	30,649.00	25,891.00	*** 45,312.50	29,350.00	
MCI	14,255.00	11,569.00			
Journal: Advertising	67,813.67	56,288.36	55,103.79	58,000.00	6-mo. income indicates $58,000 for 1966
Reprints — Journal	4,810.13	4,665.91	4,405.32	4,500.00	Always runs about this figure
Subscriptions other than members	1,259.34	1,513.12	**** 2,519.65	1,800.00	Should raise $2,000 plus this year
Total	$126,250.41	$107,071.14	$119,341.42	$118,550.00	

* $1500 Beaumont Books Sales

** For Healthmobile

*** Centennial

**** We began to charge life members

needed to maintain our present status, and certainly if we are to advance along legislative and professional channels our source of income must be increased.

At the discretion of the Speaker, the Committee feels that there should be an annual review of the adequacy of the fund for the job to be done.

THE REFERENCE COMMITTEE on Ways and Means, Fred C. Brace, MD, Chairman, commended the Committee on the monumental task of evaluating the financial structure of the MSMS and recommended the Committee continue, with as many of the same members as possible, and submit an annual rather than a three-year review of the MSMS financial structure.

The Reference Committee recommended a $10 increase in the annual MSMS dues effective January 1, 1967.

THE HOUSE adopted the report of the Reference Committee.

EXHIBIT A

Comparison of MSMS Gross Income by year

1963	1964	1965*	1966 projected
$615,491	$600,830	$621,044	$672,955

Comparison of MSMS Gross Expense

1963	1964	1965*	1966 projected
$558,328	$586,498	$707,948	$652,636

* Centennial year

Note re Michigan Clinical Institute:

The Michigan Clinical in 1963 produced income of $14,255 and expense of $13,356. In 1964, income was $11,569 and expense was $12,590. The MCI was discontinued in 1965.

EXHIBIT B

Comparison of Dues

Michigan	$ 90
Illinois	175 (includes $22 for special funds)
Ohio	50
Minnesota	100 (as of January, 1967)
Wisconsin	100 (will be 115 in October, 1967)
Indiana	80 (considering an increase)

EXHIBIT D

Michigan State Medical Society

BALANCE SHEET

July 31, 1966

ASSETS		
Current Assets		
Cash		$ 9,065.00
Savings		19,770.00
Accounts receivable		29,706.00
Pension Trust — due from employees		8,712.00
Prepaid Expenses		188.00
Total current assets		$ 67,441.00
Investments		
Bonds		8,080.00
Time certificates		75,000.00
Treasurer's account		8,790.00
Fixed Assets		
Land		75,971.00
Building	$606,235.00	
Furnishings & Equipment	83,360.00	
Less accumulated depreciation	65,708.00	623,887.00
		859,169.00
LIABILITIES		
Current Liabilities		
Notes payable		———
Accounts payable (estimated)		$ 20,000.00
Property and other taxes (estimated)		6,000.00
Total current liabilities		$ 26,000.00
Net Worth		$833,169.00
		$859,169.00

EXHIBIT E

MSMS Personnel

Brenneman, Hugh W.	— Executive Director
Tryloff, Warren F.	— Associate Executive Director
Auer, Herbert A.	— Managing Editor & Pub. Rel. Director
Riley, M. A.	— Legislative Representative
Campau, Richard M.	— Director of Economic Research
Mehler, Herbert	— Staff Asst. on Gov. Med. Care Program
Wills, Ralph T.	— Dir. Community Relations, PR Field Sec.
Schulte, Helen A.	— Administrative Assistant
Hoheisel, Peter	— PR Asst., Detroit Regional Office
Roney, Robert J.	— Accountant
Hoover, Maynard J.	— Production Manager
Ryon, Ruth	— Administrative Secretary
Davis, Vada L.	— Administrative Secretary
Brewbaker, Mary K.	— Administrative Secretary
Snelgrove, Alice	— Secretary-Writer
Karker, Marjorie	— Secretary
Veen, Jennie	— Secretary
Mueller, Julie	— Secretary
Doll, Sandra J.	— Accounting & Membership Records Asst.
Merz, Helen	— Typist-Clerk
Henderson, Audrey	— Secretary, Detroit Regional Office
Dodd, Lester P.	— Legal Counsel
Lowrey, George H., MD	— Scientific Editor
Hardwick, Clyde T.	— Economic Consultant

COMMITTEE TO STUDY MULTI-COUNTY MEDICAL SOCIETIES

D. D. Finlayson, MD, *Chairman*

This Committee held an extensive meeting on June 11, 1966.

The Chairman reviewed the annual report of the 1964-1965 predecessor Committee and the recommendations of The Council as approved by the House of Delegates in 1965. There was also review of the charge to the Committee from the Speaker to determine whether the matter of combining or subdividing county medical societies should be pursued, and a letter was read from the Chairman of the Judicial Commission expressing the Commission's interest in establishing machinery in the component societies to deal with the Judicial Commission's area of interest.

In general discussion, the Committee gave careful consideration to present boundaries of component societies, the number of members in each, and the possibility of recommending some sort of reorganization based on multiples of 50 members. It was the Committee's view that efforts should be made to improve the structure for the purpose of governmental liaison; that it would be advantageous to both the smaller units and the Society as a whole if some mechanism could be devised to better integrate the thinking of the northern area delegates; that machinery was needed within the larger component societies to extend their activities throughout the entire area represented by each component in order that more physicians in each section of the area could be better utilized and could participate in county and MSMS programs.

The Committee recognized that physicians attend many meetings and concluded that the things which motivate members of organized medicine would probably not significantly change even though the boundaries of component units were altered.

On the question of "one-man, one-vote" principle, it was concluded that this principle does not lend itself to MSMS organization due to the fact that the Society is a unicameral body and geographical representation is desirable.

The Committee made the following suggestions:

1. That the present county medical society boundaries be retained for the present.

2. That some mechanisms be super-imposed upon the existing structure for the specific purpose of improving the societies' impact in the governmental area.
3. That a better mechanism be devised for the exchange of viewpoints between delegates in the smaller county societies.
4. That it be recommended to the major metropolitan county medical societies that they pointedly extend representation on their councils and committees to physicians residing in all suburban areas or separate communities within the county medical society's sphere.

The Committee reviewed Legal Counsel's letter of May 9, 1966, regarding the possible joining of the Tuscola and Saginaw County Medical Societies and concluded that any change in structure should be made only at the instigation of the county medical society involved.

By direction of the 1965 House of Delegates and the Speaker, the Committee has engaged in a study of present society boundaries. The following questions were directed to the attention of the delegates prior to the 1966 House of Delegates meeting, with the request that each delegate express the views of the county society on each question:

In your view, would the combination of smaller county medical societies or the division of large county medical societies:

1. Enhance the implementation of overall MSMS programs?
2. Make possible more effective county medical society meetings?
3. Make possible more efficient county medical society activities?
4. Improve communication with members or utilization of their talents?
5. Do you believe that membership in the House of Delegates should be based on one delegate for each 50 members? (At present, each society is entitled to one delegate plus one for each 50 members or each major fraction thereof.)

The general discussion concluded with the Committee feeling that it might benefit the Society if MSMS were to conduct an annual program similar to the "Mayors Exchange Program" with its county medical society presidents.

THE REFERENCE COMMITTEE on Reports of Special Committees, James C. Danforth, MD, Chairman, recommended that this report be received as an interim report.

THE HOUSE adopted the report of the Reference Committee.

COMMITTEE TO STUDY PROCEDURES OF THE HOUSE OF DELEGATES

E. S. Woodworth, MD, *Chairman*

In carrying out its charge to formulate recommendations to the Speaker designed to improve the efficiency of the operations of the House of Delegates, the Committee exhaustively reviewed a recent study (The Gunderson Report) of the procedures of the House of Delegates of the American Medical Association. It also attempted to objectively analyze the scheduling changes adopted for the 1965 session to accommodate special Centennial activities, and made a review of the format of the Delegates Handbook.

The Committee noted that the regular business of the House was handled with extraordinary dispatch, and yet in such a manner as to assure complete consideration of all items by the delegates, during 1965. It recommended, therefore, that whenever possible the order of business during 1966 conform with the previous year, particularly as to providing that no resolutions be accepted after the third session (Monday evening) except by unanimous consent of the Delegates. It was also the Committee's view that the technique of pre-printing many annual reports and receiving abbreviated verbal comments with respect to them saved much valuable time without diminishing the importance or consideration of such reports.

The Committee suggested to the Speaker that he consider reducing the number of members of reference committees to an optimum number of five, and that he also designate a vice-chairman of each reference committee. It urged the earliest possible mailing of Delegates Handbooks, with a later supplemental mailing, clearly marked "Handbook Material," of resolutions and/or reports subsequently available.

The Committee further recommended to the Speaker that a change in the order of elections would be desirable: AMA Delegates first, Councilors second, AMA Alternate Delegates third, and then the remaining elections.

Finally, the Committee felt that the House could more expeditiously handle its work if the Speaker, each year, designated reference committees on the basis of business before the House rather than naming the fifteen reference committees specified in Chapter 9, Section 9 of the MSMS Bylaws. The Committee observed that there was frequently a necessarily uneven load placed on these listed reference committees. It was also recommended that the Speaker consider retaining, on a trial basis, the services of a professional parliamentarian.

THE REFERENCE COMMITTEE on Reports of Special Committees, James C. Danforth, MD, Chairman, received the report, noting that nearly all of the recommendations had been put into operation at this session. Regarding the use of a parliamentarian, the Reference Committee recommended that existing talent present in the House or in the legal staff be utilized.

THE HOUSE adopted the report of the Reference Committee.

RESOLUTIONS

THE REFERENCE COMMITTEE on Rules and Order of Business, C. W. Oakes, Jr., MD, Chairman, recommended that Robert's Rules of Order govern the proceedings and that the House follow the procedure of 1965 with no resolutions being introduced after the Monday night meeting unless by unanimous consent of the delegates or if introduced by The Council, and by this action eliminating Item 30 of the Order of Business.

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 1

Four Year College of Human Medicine at Michigan State University

Introduced by L. A. Drolett, MD

Whereas, it is recognized that there is a shortage of doctors of medicine in Michigan, and

Whereas, Michigan State University has acquired faculty and resources enabling the establishment of a pre-clinical College of Human Medicine, and

Whereas, an application has been filed with the State Board of Education to extend this facility to a complete medical college, leading to a four year curriculum and the granting of a degree of doctor of medicine in the State of Michigan, and

Whereas, this would lead to the development of new internship and residency programs in the University Medical Center and affiliated hospitals, and

Whereas, Michigan State University's programs in health professional education such as nursing, social work, speech and hearing, clinical psychology and medical technology would be benefited and be better equipped to serve the people of the State of Michigan, therefore be it

RESOLVED: That this House of Delegates go on record as supporting the request to the State Board of Education that Michigan State University be granted authority to expand its pre-clinical College of Human Medicine to a full complete college granting the degree of doctor of medicine, and be it further

RESOLVED: That the State Board of Education be respectfully requested to give this favorable consideration and to expedite this request as soon as may be possible, and be it further

RESOLVED: That a copy of this resolution be forwarded to Governor Romney and to the State Board of Education for their respective consideration.

THE REFERENCE COMMITTEE on Miscellaneous Business, Harry A. Towsley, MD, Chairman, recommended approval of the resolution with the following amendments: Substitute for the fourth Whereas, "Whereas, this would aid in providing additional medical graduates to fill existing internships and residencies furnishing doctors of medicine to the citizens of the State of Michigan." In the third Resolved substitute the words "Governor of the State of Michigan" for the word "Romney."

THE HOUSE adopted the recommendations of the Reference Committee.

RESOLUTION 2

Immediate State Support for Maximum Development of Medical Training for University of Michigan, Wayne State University, and Michigan State University Medical Schools

Introduced by Harold F. Falls, MD

Whereas, the Michigan State Medical Society has consistently encouraged and aided the development of the finest medical care for the people of the State of Michigan, and

Whereas, basic to the quality and quantity of such care is the education and the establishment in Michigan of enough properly trained doctors of medicine and satellite health personnel, and

Whereas, the Michigan State Medical Society and others believe that a shortage of doctors and certain supporting professional groups is a serious growing problem, therefore be it

RESOLVED: That the Michigan State Medical Society again urge the Legislature of Michigan, as well as the Governor and his staff, to provide sufficient funds immediately for the development of maximum efficient facilities for the training of doctors of medicine and ancillary personnel at the University of Michigan, Wayne State University and Michigan State University.

THE REFERENCE COMMITTEE on Miscellaneous Business, Harry A. Towsley, MD, Chairman, recommended approval of the resolution with the following amendments: In the Resolved portion, substitute the word "supporting" for the word "ancillary" and add to the end, after "University," "... and other institutions of higher learning involved in the training of supporting personnel."

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 3

Reinstate Partnership Billing by Blue Shield

Introduced by Henry A. Scovill, MD

Whereas, doctors working in some group practices care indiscriminately for their patients as a group, and

Whereas, partnership billing by Blue Shield would be more convenient for office help, and

Whereas, bookkeeping for Blue Cross-Blue Shield could be reduced by the number of individuals to the number of partnership offices, therefore be it

RESOLVED: That the MSMS House of Delegates request the corporate body of Blue Shield to reinstate partnership billing if requested by groups in the practice of medicine.

THE REFERENCE COMMITTEE on Medical Service and Prepayment Insurance, James B. Blodgett, MD, Chairman, recommended disapproval of the resolution for the reason that "partnership billing may not identify the provider of the service; and, although in some few cases it represents a convenience, it violates a requirement for proper fee payments by the Board of Michigan Medical Service."

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 4

Advance Presentation of Resolutions

Introduced by H. M. Golden, MD

Whereas, the most important business at the annual session of the House of Delegates is the consideration of and action on resolutions presented to it, and

Whereas, the members of the House would be better equipped to render decisions if most resolutions were presented in advance of the session for inclusion in the delegates' handbook, thereby allowing more time for study, reflection and research, and

Whereas, most resolutions in the past have been presented for the first time after meetings of the House have begun, sometimes in the later stages of the session, thereby, often putting the reference committee and the delegates under great pressure in concluding decisions before the final meeting of the House, and

Whereas, most resolutions can be presented well in advance of the Annual Session, therefore be it

RESOLVED: That all resolutions presented to the House of Delegates shall be submitted in advance of the meeting for inclusion in the delegates' handbook; the exact deadline date to be determined each year by the Speaker of the House, and be it further

RESOLVED: That resolutions presented later than this deadline will be considered by the House only when they are (1) presented by one of the sections, (2) presented by the Executive Committee of the Council, (3) accepted by unanimous consent, or (4) of an emergency nature, and be it further

RESOLVED: That the Committee on Constitution and Bylaws be instructed to amend the bylaws to include the changes presented above.

THE REFERENCE COMMITTEE on Constitution and Bylaws, James D. Fryfogle, MD, Chairman, recommended no action on the resolution because it saw no way to implement the "rather rigid Resolved portions" and because "the time of introduction of resolutions is now adequately controlled by the Committee on Rules and Order of Business."

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 5

Dual Education

Introduced by Robert M. Stow, MD

Whereas, it is vitally important to the citizens of the State of Michigan that it both educate and attract increasing numbers of physicians, and

Whereas, practically all schools of medicine in the United States issue degrees of "doctor of medicine," but five schools issue degrees of "doctor of osteopathy," and

Whereas, the curriculum of all schools for the training of physicians is so nearly identical that the redesignation or slight alteration of a few courses of study would achieve complete uniformity of subject matter, and

Whereas, the people of Michigan are best served when their physicians have been educated in institutions maintaining the highest possible standards of excellence, so that both the quantity and the quality of instruction is assured, and

Whereas, any institution issuing the "doctor of osteopathy" degree should be required to meet the standards imposed upon institutions issuing the "doctor of medicine" degree, and

Whereas, the Association of American Medical Colleges is the professional and recognized body which determines the quality of colleges issuing the "doctor of medicine" degree, and a similar body performs a similar function in the case of the five schools issuing the "doctor of osteopathy" degree, therefore be it

RESOLVED: That the Michigan State Medical Society respectfully request the appropriate Michigan governmental authorities to require that any Michigan institution of higher education which now or in the future issues degrees to physicians to include in its curriculum all elements recommended by both the Association of American Medical Colleges and its osteopathic counterpart, and be it further

RESOLVED: That all Michigan colleges thus instructing students in the full curriculum required for both the "doctor of medicine" and the "doctor of osteopathy" degree be directed by the appropriate Michigan governmental authorities to offer their students in their last year of instruction a choice, upon graduation, of either the "doctor of medicine" or the "doctor of osteopathy" degree, and be it further

RESOLVED: That legislation be sought to the effect that only graduates of osteopathic schools whose course of instruction has been approved by both the Association of American Medical Colleges and its osteopathic counterpart may be permitted by Michigan law to be examined by the Board of Osteopathic Registration and Examination and, if found qualified by them, be granted a Michigan license to practice as a "doctor of osteopathy".

THE REFERENCE COMMITTEE on Legislation and Public Relations, Philip K. Stevens, MD, Chairman, considered Resolutions 5, 61 and 63 together. It recommended no action of these resolutions at this time except that they be referred to the MSMS Committee on Medicine and Osteopathy with a recommendation that prudent efforts be made toward progress for the best medical care for the people of the State of Michigan.

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 6

Opposition to Compulsory Use of Generic Names of Drugs

Introduced by Louis Heideman, MD

Whereas, S.B. 3614 of the United States Senate would require the Federal government to pay for drugs under Medicare and all other public assistance programs only on the basis of generic prescribing, and

Whereas, there is a difference in drugs as to availability and in effectiveness in clinical accomplishments, and

Whereas, S.B. 3614 would restrict the physician's freedom of choice in selecting the drug he believes best for patients under government programs, therefore be it

RESOLVED: That the House of Delegates of the Michigan State Medical Society express its disapproval of S.B. 3614 or any other bill that would enforce generic prescriptions.

THE REFERENCE COMMITTEE on Legislation and Public Relations, Philip K. Stevens, MD, Chairman, recommended approval of the resolution with the following amendments: add the word "only" to the end of the Resolved, and adding an additional Resolved so that the Resolved portions would read:

"RESOLVED: That the House of Delegates of the MSMS express its disapproval of SB 3614 or any other bill that would enforce the use of generic prescriptions only; and be it further

RESOLVED: That the United States Senators and Representatives from Michigan be apprised of the action taken."

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 7

Pharmacist Review of Hospital Orders

Introduced by Robert Hamburg, MD

Whereas, the rule of the Michigan Board of Pharmacy in regard to the review of hospital orders by a pharmacist was approved without discussion by the House of Delegates as a part of a committee's report, and

Whereas, the implementation of this rule has resulted in increased confusion and increased costs, therefore be it

RESOLVED: That the Liaison Committee of the Michigan State Medical Society and the Michigan State Board of Pharmacy be urged to re-study the intent and effectiveness of the rule and submit a report to The Council of the State Society as to whether this rule should be rescinded or modified.

THE REFERENCE COMMITTEE on Hygiene and Public Health, John G. Slevin, MD, Chairman, amended the second Whereas to read, "Whereas, the implementation of this rule has resulted in some confusion, therefore be it;" amended the Resolved substituting the words "Pharmaceutical Association" for the words "Board of Pharmacy;" and recommended adoption of the amended resolution.

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 8

Educational Program on Crime Prevention

Introduced by Ralph Pino, MD

Whereas, there is an increasing frequency in crime and delinquency in the United States, and

Whereas, the medical profession is concerned with any problem involving suffering and death, and

Whereas, the medical profession by tradition, training and practice is in a position to recognize deviations in behavior which contribute to crime, and

Whereas, as citizens and as physicians, the medical profession has a responsibility to do what it can to modify this rising crime rate, and

Whereas, a massive educational program for both physicians and the public could be helpful in reversing this crime trend, therefore be it

RESOLVED: That the American Medical Association be urged to assume leadership in crime prevention by initiating educational programs for physicians and the public and by an appropriate study of the medical aspects of crime prevention, and be it further

RESOLVED: That the Michigan State Medical Society and each component medical society be urged to initiate similar educational programs on crime prevention.

THE REFERENCE COMMITTEE on Miscellaneous Business, Harry A. Towsley, MD, Chairman, approved the resolution amending the first Resolved to read, "That the American Medical Association be urged to continue and expand its efforts in crime prevention by initiating educational programs for physicians and the public and by appropriate studies of the medical aspects of crime prevention."

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 9

Revision of PKU Law

Introduced by William Yott, MD

Whereas, the implication of the state law regarding PKU testing is at present the responsibility of the delivering physician, and

Whereas, the newborn in a great number of cases is not cared for by the delivering physician, and

Whereas, it is advisable that a single physician be entirely responsible for the care of the newborn, therefore be it

RESOLVED: That the law be changed to read that the physician in charge of the care of the newborn be responsible for the PKU testing.

THE REFERENCE COMMITTEE on Hygiene and Public Health, John G. Slevin, MD, Chairman, inserted the words "after delivery" following the word "physician" in the second Whereas, approved the following substitute Resolved, "RESOLVED: That the physician in charge of the care of the newborn be responsible for the PKU testing, rather than the delivering physician," and recommended adoption of the amended resolution.

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 10

Statewide Policy on Telephone Listings

Introduced by Clarke McColl, MD

Whereas, each county medical society establishes its own rules on telephone listings for its members, and

Whereas, the rules of adjacent county medical societies are often in conflict, and

Whereas, such conflict in ethical rulings is confusing and disturbing to doctors and patients who work and live in different counties, therefore be it

RESOLVED: That the Judicial Commission of the Michigan State Medical Society be requested to establish rules on telephone listings that will apply to all doctors in Michigan.

THE REFERENCE COMMITTEE on Miscellaneous Business, Harry A. Towsley, MD, Chairman, approved the roslution with the following addition to the end of the Resolved: "...and that the suggested guidelines for telephone directory listings recently adopted by the AMA Judicial Council be considered in the deliberations of the Judicial Commission of MSMS."

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 11

Section on Thoracic Surgery

Introduced by Raymond Barrett, MD

Whereas, the approximately seventy-five Michigan physicians specializing in thoracic surgery desire a channel for communicating their special problems and advice to the Michigan State Medical Society, therefore be it

RESOLVED: That a Section on Thoracic Surgery be established within the Society.

THE REFERENCE COMMITTEE on Constitution and Bylaws, James D. Fryfogle, MD, Chairman, recommended approval of the resolution and presented appropriate Bylaws changes, which were laid over until the next regular meeting of the House in 1967, in accordance with MSMS Bylaws provisions.

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 12

Support of Drug Industry

Introduced by William Brosius, MD

Whereas, the scientific attainments, the standards of performance and the responsibility of the drug industry in the United States are unparalleled and surpass the combined achievements of all other countries in the world, and

Whereas, these achievements are the result of the free enterprise system and reflect the harmonious relation of the medical profession and the drug industry, and

Whereas, the advances in drugs and their ready availability to the patient have contributed immeasurably to the improvement of health and the prolongation of life within these United States, therefore be it

RESOLVED: That the House of Delegates of the Michigan State Medical Society reaffirm its support of and belief in the responsibility and the leadership of the drug industry.

THE REFERENCE COMMITTEE on Miscellaneous Business, Harry A. Towsley, MD, Chairman, approved the resolution with the following amendments: Delete the first Whereas and substitute, "Whereas, the scientific attainments and the standards of performance of the ethical drug industry in the United States are unparalleled, and," and by changing the Resolved to read, "RESOLVED: That the House of Delegates of the Michigan State Medical Society reaffirm its support and belief in the responsible leadership of the ethical drug industry."

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 13

Opposition to Limitation of Doctor's Right to Dispense

Introduced by Francis P. Rhoades, MD

Whereas, the dispensing of drugs is an integral part of the practice of medicine and has long been so recognized by the state licensure law, and

Whereas, it is frequently in the best interest of the patient to be able to obtain drugs and devices from his physician, and

Whereas, the interests of the patient are adequately protected by ethics committees of the county medical societies in accordance with the Principles of Medical Ethics, therefore be it

RESOLVED: That the Michigan State Medical Society actively oppose any limitation on the inherent right of physicians to dispense medication in the best interest of their patients, and be it further

RESOLVED: That the Michigan State Medical Society publicize the services of ethics committees of the county medical societies and its Judicial Commission in investigating any reported abuse of this right of physicians.

THE REFERENCE COMMITTEE on Legislation and Public Relations, Philip K. Stevens, MD, Chairman, recommended approval of the resolution after amending the second Whereas, deleting the words "and devices" and in the first Resolve, substituting the word "support" for the words "oppose any limitation on."

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 14

Elimination of Income Levels & Fee Schedules from Blue Shield Policies

Introduced by James Danforth, Jr., MD

Whereas, the medical profession has for many years subsidized through Michigan Medical Service the cost of medical care to the aged and other patients in low income groups by the acceptance of reduced fees, and

Whereas, under Public Law 89-97 the government has now assumed responsibility for financing the medical care for the aged and the medically indigent, and

Whereas, the Federal government and the American Medical Association both recognize the concept of customary, prevailing and reasonable fees, therefore be it

RESOLVED: That the House of Delegates of the Michigan State Medical Society request the Michigan

Medical Service to explore methods of fee payment other than those involving the use of the fixed fee schedules related to income levels.

THE REFERENCE COMMITTEE on Medical Service and Prepayment Insurance, James B. Blodgett, MD, Chairman, recommended no action on the resolution since the intent had been accomplished through the adoption of Resolution 36.

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 15

Utilization of Medical Societies Committees for Medicare Complaints

Introduced by Arthur Levant, MD

Whereas, patients under the Medicare program are entitled to a fair hearing on their complaints before the local intermediary of Health, Education and Welfare, and

Whereas, these required programs may involve questions concerning a physician's qualifications, competency and services, and

Whereas, only the medical profession is qualified to judge the competency of physicians and the quality of medical care, therefore be it

RESOLVED: That on questions involving competency of physicians and quality of medical care all hospitals in Michigan and Michigan Medical Service be urged to utilize the services of the grievance or review committee of the local medical society.

THE REFERENCE COMMITTEE on Resolutions, Harold F. Falls, MD, Chairman, recommended approval of the resolution with an amendment to the Resolved, substituting the word "appropriate" for the words "the grievance or review."

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 16

Definition of Customary, Prevailing and Reasonable Fee

Introduced by George Reno, MD

Whereas, the Department of Health, Education and Welfare has accepted the concept of "customary, prevailing and reasonable fees" to physicians under Public Law 89-97, and

Whereas, these terms are not defined in the law, and

Whereas, the American Medical Association House of Delegates has deferred action on the matter until its Clinical Session in November, and

Whereas, the membership needs immediate guidance in the interpretation of these terms in billing for services under Public Law 89-97, therefore be it

RESOLVED: That the House of Delegates of the Michigan State Medical Society hereby adopt the following definitions as approved in principle by the American Medical Association House of Delegates:

Customary relates to the individual physician and the charge which he most commonly establishes as fair recompense for specific services.

Prevailing relates to the range of usual charges made by physicians of similar ability and experience for the same service within the same specific socio-economic limited geographic area.

Reasonable: A fee is "reasonable" when it meets the "customary and prevailing" criteria or, in the opinion of a duly constituted medical society review committee, is justified under what is considered a complexity of treatment which merits special consideration, and be it further

RESOLVED: That a copy of the above definitions be forwarded to Michigan Medical Service as fiscal agent of the Medicare program in Michigan.

THE REFERENCE COMMITTEE on Resolutions, Harold F. Falls, MD, Chairman, recommended approval of the resolution, amending the first Resolved to read as follows: "RESOLVED: That the House of Delegates of the MSMS hereby adopts the following definitions:

CUSTOMARY relates to the individual physician and the charge which he most commonly establishes as fair compensation for specific services.

PREVAILING relates to the range of usual charges made by physicians of similar ability and experience for the same service within the same specific socio-economic limited geographic area.

REASONABLE: A fee is "reasonable" when it meets the "customary and prevailing" criteria or, in the opinion of a duly constituted medical society committee, is justified under what is considered a complexity of treatment which merits special consideration, and be it further"

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 17

Hospital Progress Notes Sufficient Evidence of Medical Necessity for Medicare

Introduced by Clifford W. Colwell, MD

Whereas, Public Law 89-97 (Medicare) is now in force and effect, and

Whereas, there is contained in said law the requirement for certification for admission and recertification of medical necessity for continued stay in any hospital, and

Whereas, the physician as the treating doctor does know of the condition of the patient at any given time and does know of the medical necessity of further hospital care, and

Whereas, hospital records as presently in use themselves do contain, and have contained, progress notes, therefore be it

RESOLVED: That the membership of the Michigan State Medical Society be and is in support of an entry only in the hospital progress notes that in-patient services or continued services are medically necessary and be it further

RESOLVED: That the membership is opposed to any further, additional or special form to accomplish this same fact.

THE REFERENCE COMMITTEE on Resolutions, Harold F. Falls, MD, Chairman, recommended the resolution be not approved.

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 18

Legislation Regarding the Practice of Medicine and Osteopathy

Introduced by Clifford W. Colwell, MD

Whereas, doctors of medicine have as their prime purpose the responsibility of the welfare of the patient under their care, and

Whereas, doctors of osteopathy have the identical purpose, and

Whereas, the practice of osteopathy has greatly progressed since its inception some years ago, and

Whereas, practitioners of osteopathy must perform with the same learning and skills as practitioners of medicine, and

Whereas, both doctors of osteopathy and doctors of medicine wish to increase their learning and skills, and thus maintain their responsibility to the patient, therefore be it

RESOLVED: That the membership of the Michigan State Medical Society be and is in support of a bill to present to the State Legislature at its earliest opportunity declaring the practice of osteopathy and the practice of medicine to be one and the same profession and that a single medical practice act be promulgated therefore.

THE REFERENCE COMMITTEE on Legislation and Public Relations, Philip K. Stevens, MD, Chairman, considered Resolutions 18 and 34 together. The Reference Committee recommended no action at this time and that they be referred to the MSMS Committee on Medicine and Osteopathy with the recommendation that legal advice be obtained before this problem is presented to the Michigan Legislature.

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 19

Dues Increase for Augmented Legislative, Governmental and Public Relations Program

Introduced by Gerhard H. Bauer, MD

Whereas, the Michigan State Medical Society is the only organized professional body in the State with the public charge and the ability to provide leadership in the development of a proper environment for most of the aspects of research, education and practice of medical care and related activities, and

Whereas, the several Legal Affairs, Executive Office Liaison, Public Relations and other committees of the Society, as well as the general membership and the staff, have demonstrated understanding and great skill in providing this leadership in the face of almost unbelievable odds, and

Whereas, support from selected key citizens has proven to be indispensable and should be augmented, and

Whereas, past accomplishments notwithstanding, there is growing evidence that public understanding and implementation of this leadership role must be improved rapidly, therefore be it

RESOLVED: That The Council of the Michigan State Medical Society work with the chairmen of the Society committees named above and others to strengthen and augment the techniques and programs which have worked so well, at the same time it broadens the base of Michigan State Medical Society legislative, governmental, public relations and ancillary activities, without delay, and be it further

RESOLVED: That any new program adopted be designed, among other things, to attract our own skilled members and additional key citizens into a more active role in legislative, governmental and public relations activity, with adequate staff support, and be it further

RESOLVED: That a ten dollar increase in annual dues be ordered to get this program under way.

THE REFERENCE COMMITTEE on Ways and Means, Fred C. Brace, MD, Chairman, recommended disapproval of the resolution because the Reference Committee felt it was not in the best interest of the Society to restrict the use of monies and because of subsequent considerations and recommendations in connection with the House of Delegates Committee to Study MSMS Financial Structure.

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 20

Extending of Thanks to the MSMS Woman's Auxiliary for Hosting the Healthmobile During Its Year-Long, Statewide Tour of Exhibition

Introduced by V. A. Marks, MD

Whereas, the Healthmobile has been an important and very successful part of the Centennial Celebration of the Michigan State Medical Society during the year 1965-1966; and

Whereas, the presentation of the Healthmobile to the citizens of Michigan would have been virtually impossible without the proper hosting of the unit, and

Whereas, the Woman's Auxiliary of MSMS so graciously assumed the responsibility of the hosting and did it so very well, with assistance of nurses, medical assistants, hospital auxiliaries, Future Nurses and Candy-Stripers, therefore be it

RESOLVED: That the Michigan State Medical Society give a deep and sincere vote of thanks and appreciation to the Woman's Auxiliary who, with the assistance of nurses, medical assistants, hospital auxiliaries, Future Nurses and Candy-Stripers, gave such splendid service in helping to bring the Healthmobile exhibits to over 180,000 visitors during the statewide tour of the Healthmobile.

THE REFERENCE COMMITTEE on Miscellaneous Business, Harry A. Towsley, MD, Chairman, recommended approval of the resolution.

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 21

Commendation of Healthmobile

Introduced by Brock E. Brush, MD

Whereas, the Michigan State Medical Society was instrumental in creating a mobile Healthmobile to take the history of Michigan medicine to the people, as a continuing year-long project of its Centennial observance, and

Whereas, many health-oriented organizations and several hundreds of people contributed time, effort, material and money toward the maintenance and travel of the unit throughout the State, therefore be it

RESOLVED: That a resolution of commendation and thanks be given to all persons who were instrumental in conceiving, producing, organizing and presenting the Healthmobile to the public during the Centennial Year, and be it further

RESOLVED: That a brief resume of its statewide, year-long journey be herein recorded:

One of the major MSMS efforts this past year in public education, career recruitment and community relations was the Healthmobile, a health-museum-on-wheels.

Dedicated at the 1965 MSMS Centennial Session, the mobile unit has traveled across the State under the sponsorship of the county medical societies to tell school students and adults about the exciting Michigan developments in medical research and health care.

The Healthmobile first appeared in Ingham County on October 15 and traveled into a different community each week, with the local Woman's Auxiliary serving as hostesses. Local nurses, medical assistants, hospital auxiliaries, Future Nurses Clubs and Candy-Stripers generously assisted in the hosting. Excellent cooperation was obtained from city and school officials, power companies, police departments and the mass media. By September 15 the Healthmobile had visited forty-five communities. Attendance figures for the October 15, 1965 — September 15, 1966, period were estimated to be 180,000, including 75,000 students of all ages.

Contributions toward the cost of developing the Healthmobile included the loan of the 12 x 50 foot mobile unit, built to MSMS specifications, by the Marlette Coach Company; $10,500 from the Sears-Roebuck Foundation; $1,000 from Merck, Sharp & Dohme, and a contribution from the AMA.

Special exhibits were developed by the three medical schools, the Michigan Department of Public Health, the Upjohn Company, Parke, Davis and Company, the Michigan Health Council and the American Medical Association. Other authentic displays, created by MSMS, helped to develop the slogan, "A Century of Service in Michigan."

It would be impossible to mention by name all of the organizations, associations and educational institutions who furnished the many thousands of pieces of literature having to do with medically-oriented careers, and general health information, that were passed out to visitors of the Healthmobile.

Generally, the Healthmobile focused attention on the contributions of Michigan medicine and the concern of Michigan physicians for the good health of Michigan residents. Locally, it served as an excellent public educational device for the county medical society and its auxiliary to perform a service for the school children, their parents, and other interested adults. The impact the unit had on good health practices and career recruitment cannot be measured. It is considered the most outstanding community relations project ever sponsored by MSMS.

The nation's first Healthmobile, with exhibits valued at $75,000, proved to be a continuing project bringing the 1965-1966 MSMS Centennial observance of "A Century of Service in Medicine" to all sectors of Michigan.

The members of MSMS can be proud of this outstanding community relations achievement, and by this resolution express thanks to all who assisted in this worthwhile project.

THE REFERENCE COMMITTEE on Miscellaneous Business, Harry A. Towsley, MD, Chairman, approved the resolution amending the first Resolved to read, "That a resolution of commendation and thanks be given to all persons who were instrumental in conceiving, producing, organizing, presenting and underwriting the expenses of the Healthmobile to the public during the centennial year."

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 22

Definition of Specialist

Introduced by Edward E. Elder, Jr., MD

Whereas, Title XVIII and Title XIX of Public Law 89-97 clearly state a differentiation between generalist and specialist, and

Whereas, it would be expedient for the House of Delegates rather than the federal government to make such a distinction, therefore be it

RESOLVED: That the House of Delegates adopt the following definition of a specialist:

A specialist shall be a physician

(1) certified by the appropriate specialty board, approved by the Advisory Board for Medical Specialties and by the American Medical Association Council on Medical Education, or

(2) practicing as a specialist not possessing a specialty board certificate but

- (a) has completed an approved residency in that specialty or has been graduated from medical school before 1945, and
- (b) has had at least four years experience in a given specialty (including the recognized residency), and
- (c) has at least 50 per cent of his practice devoted to a given specialty, and
- (d) is recognized as a specialist by a hospital in which he practices provided it is an accredited hospital.

THE REFERENCE COMMITTEE on Resolutions, Harold F. Falls, MD, Chairman, recommended approval of the resolution with the following amendments: insertion of the words "does not" before the word "clearly" in the first line, change "50" to "60" in section (2)c and, in (2)d, substituting for the word "a" before the word "hospital" the phrase "the staff of the."

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 23

A Concept of Fair and Reasonable Fees

Introduced by Edward E. Elder, Jr., MD

Whereas, the fiscal agent in the State of Michigan—Blue Shield—is now operating under various fee schedules (M-75, Title XVIII, Federal employees), therefore be it

RESOLVED: That Blue Shield take under study in the near future and report directly to The Council of MSMS a concept of fair and reasonable fees, thus eliminating the present fee schedule of M-75.

THE REFERENCE COMMITTEE on Medical Service and Prepayment Insurance, James B. Blodgett, MD, Chairman, recommended no action on the resolution since the intent had been accomplished through the adoption of Resolution 36.

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 24

Approval of Legislative Review of "Healing Arts" Licensure and Practice Laws

Introduced by Robert M. Stow, MD

Whereas, the Michigan State Legislature has adopted House Concurrent Resolution No. 296 and has thereby created a special committee to "review licensure and practice acts related to medicine and the healing arts and to study the rights and relationships of consumers of such services", and

Whereas, the so-called "healing arts" have proliferated in recent years as the patterns for delivering of health care have changed to meet the needs of the mid-twentieth century, and

Whereas, each existing or newly established "branch of the healing arts", other than those fully licensed by the State of Michigan to practice medicine in all of its aspects, seeks licensure and license to treat illness in human beings, and

Whereas, the extent to which persons may be legally permitted to practice the so-called "healing arts" on their fellow man must be a direct reflection of the quantity, caliber and scientific foundation of their education and training, and

Whereas, for the protection of the public no one should be permitted practices for which he is unqualified, but in order to assure the best use of available manpower, all persons should be permitted to function in the health field to the full limit of their qualifications as determined by experts in the field of medical education, therefore be it

RESOLVED: That the Michigan State Medical Society urge the Michigan State Legislature, in implementing House Concurrent Resolution No. 296, to thoroughly review existing licensing and practice acts for all paramedical fields, updating them where appropriate, and removing from such acts any general and vague clauses by reference to which licensees may invade fields for which they are not properly trained, and be it further

RESOLVED: That this House of Delegates commend the Michigan State Legislature for its interest in protecting the public through taking all possible steps to assure quality health care.

THE REFERENCE COMMITTEE on Legislation and Public Relations, Philip K. Stevens, MD, Chairman, recommended approval of the resolution.

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 25

Separation of the House of Delegates Meeting of the MSMS From the Scientific Fall Session of MSMS

Introduced by Robert J. Toteff, MD

Whereas, the present time of the meeting of the House of Delegates of the Michigan State Medical Society is after the summer months and often there is not sufficient time for component societies to discuss current issues, and

Whereas, this time is a long time from the House of Delegates meeting of the American Medical Association in the spring to which our elected delegates must go, and

Whereas, to change the time of the State Scientific Convention is difficult because of the many commitments necessary, and

Whereas, at the American Medical Association Public Relations meeting, definite advantages were shown to exist in the separation of the scientific and legislative meetings, and

Whereas, a separate meeting of the House of Delegates without the scientific meeting can be done without great difficulty, and

Whereas, the meeting of the House of Delegates then may be scheduled at a more central location, possibly at the Michigan State Medical Society headquarters, East Lansing, therefore be it

RESOLVED: That the House of Delegates meeting be held in March or April every year and separate from the scientific sessions, and be it further

RESOLVED: That the American Medical Association Delegates elected at this meeting attend the midyear American Medical Association meeting and the Constitutional changes necessary to effect this be enacted.

THE REFERENCE COMMITTEE on Special Committees, James C. Danforth, MD, Chairman, considered Resolutions 25 and 27 together and recommended approval of the following:

Substitute Resolution

Whereas, the present date selected for the meeting of the House of Delegates follows three months of relative inactivity in most county societies, and

Whereas, issues concerning policy and legislation usually are placed before component chapters in the early spring, and

Whereas, State delegates to the AMA attend the national meeting in midsummer and should have current instruction by the House of Delegates; therefore be it

RESOLVED: That the House of Delegates schedule its meeting for a suitable date in March or April of each year.

THE HOUSE did not adopt the Substitute Resolution for Resolutions 25 and 27. Instead, it referred Resolutions 25 and 27, as originally presented, to the House of Delegates Committee to Study Procedures of the House for report at the next annual meeting.

RESOLUTION 26

Blue Shield Insurance

Introduced by V. A. Marks, MD

Whereas, the practice of medicine is a team proposition, with attending physicians, consulting physicians and surgeons, and

Whereas, Blue Shield is supposedly the doctors' plan, and

Whereas, in many hospitals today intern and resident shortage makes assistance by an attending man many times mandatory, and

Whereas, surgically dictated medical ethics denies payment to the referring physician by the surgeon, requiring a separate individual charge to patient not covered by insurance, which, in some cases, may in the future cause the patient to bypass the attending physician in patient diagnosed surgical conditions, therefore be it

RESOLVED: That Blue Shield Board of Directors resolutely study the equitable payment of all members of the patient-medical team, including assistant where required by regulation.

THE REFERENCE COMMITTEE on Medical Service and Prepayment Insurance, James B. Blodgett, MD, Chairman, recommended approval of the resolution as amended. The committee amendments to the Resolved substituted the words "physician team" for the words "patient-medical team" and deleted the last six words, reading, "including assistant where required by regulation."

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 27

Meeting Change for MSMS House of Delegates

Introduced by V. A. Marks, MD

Whereas, most county medical societies are inactive in the summer, and

Whereas, we would be better informed as to activities of each society if the MSMS House of Delegates meeting was changed, and

Whereas, in this day and time we need to know what laws the State Legislature and United States Congress are considering that are of interest to our medical society, since both of these convene in January and we can be better informed, and

Whereas, many state organizations now have separate House of Delegates meetings from scientific meetings, therefore be it

RESOLVED: That the House of Delegates meeting be held in late winter or early spring as a separate meeting from the annual Scientific Meeting in the fall.

THE REFERENCE COMMITTEE on Special Committees, James C. Danforth, MD, Chairman, considered Resolutions 25 and 27 together.

For Reference Committee and House action see Resolution 25.

RESOLUTION 28

Hospital-Based Specialists

Introduced by Fred C. Brace, MD

Whereas, the House of Delegates of the American Medical Association resolved in 1965 that "The fees for the services of hospital-based specialists should not be merged with hospital charges", and

Whereas, The Council of MSMS in February, 1966, stated that "The fees of hospital-based radiologists shall not be merged with hospital charges. The charges for the services of such specialists shall be established, billed and collected by the radiologists in the same manner as are the fees of other physicians", and

Whereas, this clearcut separation of professional fees from hospital charges is necessary to prevent establishment of complete hospital control of a part of the medical profession through Congressional health legislation and through Department of Health, Education and Welfare regulations, and

Whereas, the Michigan State Medical Society is the corporate body of Michigan Medical Service, and

Whereas, Michigan Medical Service has not yet established a professional fee schedule and billing procedure for radiologic procedures separate and independent of hospital charges for Michigan Medical Service subscribers, and

Whereas, this lack seriously hampers the otherwise successful efforts of Michigan radiologists to sever their contract relationships with hospitals as recommended by the American Medical Association and as directed by The Council of MSMS, therefore be it

RESOLVED: That this House of Delegates hereby directs Michigan Medical Service to prepare and to implement a professional fee schedule and billing mechanism for radiologic procedures in hospitals separate from and independent of hospital charges and billing procedures.

THE REFERENCE COMMITTEE on Medical Service and Prepayment Insurance, James B. Blodgett, MD, Chairman, recommended no action on the resolution "since the purpose of the resolution has been accomplished in the current Michigan RVS, which provides professional fees for radiologic procedures, and also since payments are being currently arranged by Michigan Medical Service for the professional radiologic services."

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 29

Usual and Customary Fees

Introduced by Kornelius Van Goor, MD

Whereas, in the language of certain federally sponsored medical service programs the use of the term "usual and customary fees" as the basis for payment to physicians is due, and

Whereas, it is presumed that "usual and customary fees" refers to such fees as individual physicians approve, and

Whereas, such fees have varied from time to time and from case to case, although within certain reasonably defined ranges, nevertheless, variable economic conditions and living costs have led to a general increase in such fees over the years, therefore be it

RESOLVED: That physicians' and surgeons' "usual and customary fees" be recognized as being non-static in nature and variable from time to time, and be it further

RESOLVED: That this concept be communicated through channels determined by The Council to appropriate governmental units and agents.

THE REFERENCE COMMITTEE on Resolutions, Harold F. Falls, MD, Chairman, recommended approval of the resolution with two amendments: in the first Whereas, substituting the word "employed" for the word "due," and in the first Resolved, substituting the word "flexible" for the word "non-static."

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 30

Medicare Fees

Introduced by Noyes L. Avery, Jr., MD

Whereas, the federal government has set up a method of compensation to individuals 65 years and older for their medical expenses, and

Whereas, the system known as "Medicare" has been generally accepted by the medical profession, and

Whereas, this system entails both substantial responsibility of the individual as well as responsibility of the government for payment of medical expenses, and

Whereas, the essence of the federal program guarantees partial (although substantial) payment for medical expenses, and

Whereas, the federal program provides primarily for reimbursement of the individual for his medical expenses, therefore be it

RESOLVED: That in the course of collection of medical fees the recipient of services is primarily responsible for obtaining insurance and Medicare benefits, and be it further

RESOLVED: That obtaining "assignments" for partial payment of medical fees under the Medicare program should not be considered favored medical practice.

THE REFERENCE COMMITTEE on Resolutions, Harold F. Falls, MD, Chairman, recommended no action on this resolution because "The patient, in certain unusual circumstances, might find it impossible, because of mental or physical incompetency, to implement the responsibility urged in this resolution."

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 31

Expansion of Enrollment in Michigan Medical Schools

Introduced by A. R. VandenBerg, MD

Whereas, there continues to be an acute shortage of doctors of medicine in several areas of Michigan, and

Whereas, there will be increasing demands for professional services as the science of medicine becomes more complex and Medicare and Medicaid are further implemented, and

Whereas, the deans of Michigan's three medical schools publicly outlined plans to the State Board of Education for increasing, by 46%, the number of admissions to Michigan medical schools by 1969, therefore be it

RESOLVED: That the Michigan State Medical Society indicate to the board of regents and the dean of each medical school its strong support of this expansion, the urgent need to expedite it, thereby fulfilling our commitment to the people of Michigan, and be it further

RESOLVED: That The Council of the Michigan State Medical Society take steps to develop a committee, including legislators, medical educators and doctors of medicine, whose role it will be to provide continuing pressure for medical school expansion and that information of this action be transmitted to the State Legislature.

THE REFERENCE COMMITTEE on Miscellaneous Business, Harry A. Towsley, MD, Chairman, recommended approval of the resolution as presented.

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 32

Expansion of the School of Human Medicine of Michigan State University to Four Years

Introduced by Victor A. Notier, MD

Whereas, the demand for increasing numbers of doctors of medicine in Michigan will necessitate increased medical training facilities, therefore be it

RESOLVED: That the Michigan State Medical Society recommend to the State Board of Education and the State Legislature that the College of Human Medicine of Michigan State University be expanded to a four year medical school.

THE REFERENCE COMMITTEE on Miscellaneous Business, Harry A. Towsley, MD, Chairman, recommended no action on this resolution since its intent is identical with the intent of Resolution 1.

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 33

Driving and Alcohol

Introduced by Richard A. Rasmussen, MD

Whereas, statistics reveal that fifty percent or more of all fatal motor vehicle accidents involve drinking drivers, and

Whereas, the driving of an auto vehicle while under sufficient influence of alcohol to impair driving is actually infringing upon the rights of other citizens and placing lives in jeopardy, and

Whereas, a drinking driver is actually violating his rights and driving privileges by his very action, and therefore not entitled to dissent from taking tests, and

Whereas, the highways are constantly becoming more congested with motor vehicles, and statistics reveal that the consumption of alcohol is increasing, and

Whereas, the medical profession is concerned not only with the restoration of diseased and injured persons to health, but also with the prevention of injury, disease and death, therefore be it

RESOLVED: That the Michigan State Medical Society encourage the enactment of statutes by the State Legislature providing for the mandatory determination of blood alcohol, or the use of approved breathing tests, on drivers suspected of having sufficient alcohol to impair their driving, that such tests may be ordered without specific consent under an Implied Consent Law, and be it further

RESOLVED: That the Michigan State Medical Society encourage legislation which will compel the use of blood alcohol and other tests to establish degrees of impairment of driving ability, and that these shall be used to establish violations of the law.

THE REFERENCE COMMITTEE on Legislation and Public Relations, Philip K. Stevens, MD, Chairman, recommended no action on this resolution. The Committee agreed with the intent, but because of the complicated legal aspects entailed, it recommended the resolution be referred to the MSMS Legal Affairs Committee urging that all possible steps be taken to reduce the number of automobile accidents on the highways of Michigan due to alcoholism.

THE HOUSE did not accept the report of the Reference Committee but adopted the resolution as introduced.

RESOLUTION 34

Enactment of a Single Medical Practice Law

Introduced by John H. McLaughlin, MD

Whereas, the primary concern of Michigan doctors of medicine is the health needs of the people of Michigan, and

Whereas, this likewise is the primary concern of doctors of osteopathy, and

Whereas, the basic tenets of these two disciplines are essentially identical, and

Whereas, the present duplication of systems reduces the opportunity for attaining maximum standards of achievement in education, in research and ultimately in the care of the patient, therefore be it

RESOLVED: That the House of Delegates reaffirm its endorsement of a single medical practice act, and be it further

RESOLVED: That the Michigan State Medical Society promote legislation toward enactment of a single medical practice act.

THE REFERENCE COMMITTEE on Legislation and Public Relations, Philip K. Stevens, MD, Chairman, considered Resolutions 18 and 34 together.

For Reference Committee and House action, see Resolution 18.

RESOLUTION 35

Implementation of Michigan Relative Value Study

Introduced by Harold Oster, MD

Whereas, the Michigan State Medical Society through the House of Delegates has approved the 1965 Michigan Relative Value Study and

Whereas, the Medicare Public Law 89-97 has resulted in a marked increase in non-productive paper work and other demands on the time of physicians, and

Whereas, Michigan Medical Service has not utilized the coding and description of service in the Michigan RVS either as a fiscal agent for Medicare and related program or in other Blue Shield contracts, therefore be it

RESOLVED: That Michigan Medical Service be advised that the Michigan State Medical Society desires that the Michigan 1965 RVS be used in description and coding of services.

THE REFERENCE COMMITTEE on Medical Service and Prepayment Insurance, James B. Blodgett, MD, Chairman, recommended approval of the resolution as amended. The committee amended the Resolved portion by deleting the word "1965" preceding "RVS" and inserting the word "current" preceding "Michigan" so that the phrase reads "... the current Michigan RVS ..."

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 36

Regarding Future Blue Shield Contracts

Introduced by Harold Oster, MD

Whereas, the existing Michigan Medical Service contracts have become outdated and contain recognized inequities in their fee schedules, and

Whereas, there is no longer any valid reason for the Michigan State Medical Society to subsidize any segment of the population, therefore be it

RESOLVED: That all new Michigan Medical Service contracts use the 1965 Michigan Relative Value Study with an appropriate conversion factor as a guideline for payment with each physician charging his usual and customary fee for services rendered.

THE REFERENCE COMMITTEE on Medical Service and Prepayment Insurance, James B. Blodgett, MD, Chairman, amended the Resolve to read, "RESOLVED: That Michigan Medical Service contracts use the current Michigan Relative Value Study with an appropriate conversion factor as a guideline for payments, paying each physician his usual, customary and reasonable fee for services rendered." The Committee recommended approval of the resolution as amended.

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 37

Payment To Specialists Under M-75

Introduced by Stuart Gould, MD

Whereas, the federal government program of medical care for the aged recognizes a fee differential for diagnosis and treatment by medical specialists through its authorization of "usual and customary" fees for professional services, and

Whereas, Michigan Medical Service M-75 contracts do not differentiate in terms of fees between care given by medical specialists and by generalists, therefore be it

RESOLVED: That Michigan Medical Service re-evaluate its M-75 contracts to allow "usual and customary" fee payment for care by specialists without regard to age or income level or diagnosis and not confined to beneficiaries of Medicare.

THE REFERENCE COMMITTEE on Medical Service and Prepayment Insurance, James B. Blodgett, MD, Chairman, recommended no action on the resolution since the intent had been accomplished through the adoption of Resolution 36.

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 38

Heart-Cancer-Stroke Program

Introduced by William G. Birch, MD

Whereas, Public Law 89-239 is now a law, and

Whereas, although need for it was debated, it was much improved before enactment by adoption of suggestions made by the AMA, and

Whereas, the purpose of this law is to improve patient care by aiding the physician to keep abreast of important advances in the fields of heart disease, cancer, stroke, diabetes and kidney disease, and

Whereas, implementation of this law requires close cooperation between all parties concerned, including primarily physicians, hospitals and medical centers, therefore be it

RESOLVED: That the Michigan State Medical Society declare again its desire to further every action that improves patient care, and be it further

RESOLVED: That the Michigan State Medical Society assure its desire to cooperate with and promote the HCS program at all levels, toward attaining its professed goal, and be it further

RESOLVED: That the Michigan State Medical Society commend the deans of our medical schools for their initiative and demonstrated collaboration in implementing the planning phase of this program.

THE REFERENCE COMMITTEE on Resolutions, Harold F. Falls, MD, Chairman, recommended approval of the resolution substituting the following for the second Resolved:

"RESOLVED: That the MSMS exert its leadership to assure the implementation of Public Law 89-239 be directed to the education of physicians and not involve patient care."

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 39

Nursing Wage Scale

Introduced by Harvey M. Andre, MD

Whereas, the professional nurse undergoes several years of training, usually financially nonremunerative and/or involving actual expense, and

Whereas, the degree of skill, the demanding perfection of the service, the special degree of personality integration, the devotion and the integrity required are of unusual degree, and

Whereas, their services make a major contribution to the health and well being of the members of the community and to the productivity of the community and its enterprises, thus entitling them to share in the community's prosperity, and

Whereas, their financial compensation is not fairly proportional to that of other similarly trained responsible groups of individuals in our society (community) despite their more stringent training, demanding working conditions, and unusual and often unpredictable working hours, and

Whereas, the medical profession is among the few groups which can appraise the working conditions and the services rendered and therefore has the responsibility to seek fair reimbursement for these individuals despite even the opposition of politically powerful but self-interested groups, therefore be it

Resolved: That the Michigan State Medical Society hereby records its support of remuneration to nursing personnel commensurate with that received by other members of the community with similar degrees of training and skill and equally demanding working conditions, and be it further

RESOLVED: That the Michigan State Medical Society appoint a committee (1) to establish liaison with the organizations involved including the Michigan Hospital Association, (2) to help establish such fair compensation standards, (3) to keep these standards of compensation current, and (4) to assist these organizations in all ways possible to attain compensation for their individual members' services that meet these standards.

THE REFERENCE COMMITTEE on Resolutions, Harold F. Falls, MD, Chairman, recommended approval of the resolution suggesting that it be referred for consideration and appropriate action to the MSMS Committee on Nursing.

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 40

Michigan Relative Value Study

Introduced by A. Jackson Day, MD

Whereas, Public Law 89-97 authorizes payment to physicians of their customary and prevailing fees, and

Whereas, the Michigan Relative Value Study with a conversion factor is a fee schedule, therefore be it

RESOLVED: That the House of Delegates of the Michigan State Medical Society rescind any conversion factor for the Michigan Relative Value Study, and further

RESOLVED: That Michigan Medical Service, as fiscal agent for Medicare, be notified of this action.

THE REFERENCE COMMITTEE on Medical Service and Prepayment Insurance, James B. Blodgett, MD, Chairman, recommended disapproval of the resolution.

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 41

Change of Requirements for Certified Income Status of Policyholders of Michigan Medical Service

Introduced by Edwin H. Terwilliger, MD

Whereas, Michigan Medical Service certifies the income of many policyholders for the purpose of sealing fee benefits payable to physicians, and

Whereas, physicians participating in the Michigan Medical Service program are bound to accept as full fee said scaled payments from Michigan Medical Service in cases where the patient falls under a certified income policy, and

Whereas, in many cases, the holder of the policy is not the major family breadwinner, and

Whereas, in most of these cases, the major breadwinner's income would, if considered, put the status of the policy in another bracket, and

Whereas, many of these policyholders/patients are fully able to pay the physician's full customary and reasonable fee, therefore be it

RESOLVED: That Michigan Medical Service be requested to classify any policy held by other than the major breadwinner in a household/family as non-certified.

THE REFERENCE COMMITTEE on Medical Service and Prepayment Insurance, James B. Blodgett, MD, Chairman, recommended approval of this resolution.

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 42

Change of Law Relating to Money or Personal Property of Deceased; Disposition; by Attending Medical Examiner

Introduced by Edwin H. Terwilliger, MD

Whereas, Section 8 of Act 181, effective January 1, 1954, MSA 5.953 (8), prescribes the medical examiner shall take charge of any money or personal property of the deceased found upon or near the body, and

Whereas, according to said section of said act, said medical examiner shall deliver said personal property or money to the person entitled to the custody or possession of such body; or if not claimed by such person within 60 days, then to an administrator to be administered upon according to law, and

Whereas, such guardianship of said money or personal property is outside the realm of professional activities of and demands upon said medical examiners in pursuit of duties, therefore be it

RESOLVED: That legislation be introduced to revise Section 8 of Act 181, MSA 5.953 (8), to provide that such guardianship of said money or personal property be transferred to the officer of the municipal, county or state law enforcement agency in charge in attendance, and be it further

RESOLVED: That said law enforcement officer shall deliver said personal property or money to the person entitled to the custody or possession of such body; or if not claimed by such person within 60 days, then to an administrator to be administered upon according to law.

THE REFERENCE COMMITTEE on Legislation and Public Relations, Philip K. Stevens, MD, Chairman, recommended approval of the resolution after amending the first Resolved to read, "RESOLVED: That legislation be introduced to revise Section 8 of Act 181, MSA 5.953 (8), to provide that guardianship of such properties as the medical examiner deems necessary shall be retained by him." Also, the Reference Committee deleted the second Resolved in its entirety.

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 43

Disclosure of Medical Records

Introduced by Frank Walker, MD

Whereas, in 1964 the House of Delegates of the Michigan State Medical Society expressed vigorous opposition to a proposed amendment to the General Court Rules of Michigan, to wit: "Rule 311.2 (2) Commencement of suit for personal injuries by any party shall constitute a waiver of the patient-physician privilege, the attorney-client privilege relating to the physical or mental condition of the person seeking damages, or any other privilege relating to his physical or mental condition," and

Whereas, there is reportedly a renewed interest in attaining the objective of this proposal either by adoption of the above amendment or by legislative action, and

Whereas, the confidential physician-patient relationship is essential for proper diagnosis and medical treatment, therefore be it

RESOLVED: That the House of Delegates reaffirm its opposition to any change in court rules or in the statute to waive the physician-patient privilege when lawsuit is initiated, and be it further

RESOLVED: That a copy of this resolution be forwarded to the State Bar of Michigan.

THE REFERENCE COMMITTEE on Legislation and Public Relations, Philip K. Stevens, MD, Chairman, recommended approval of the resolution.

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 44

Discrepancy in Fees

Introduced by Robert M. Leitch, MD

Whereas, fees charged Medicare patients and those other patients qualifying for public assistance must be "customary, prevailing and reasonable fees," and

Whereas, fees paid by Michigan Medical Service, particularly in the A and B Plans, have long been less than "customary, prevailing and reasonable," and

Whereas, as "vendors" of services, doctors must certify that the fees charged are "customary, prevailing and reasonable," thus creating a discrepancy, therefore be it

RESOLVED: That the House of Delegates of the Michigan State Medical Society recommend to the Board of Directors of Michigan Medical Service that fees be brought up to "customary, prevailing and reasonable" fees, viz. a conversion factor of $5.00 in the Relative Value Scale, thus eliminating the discrepancy, and be it further

RESOLVED: That if this is not done, participation in Blue Shield should be given serious reconsideration because of the discrepancy.

THE REFERENCE COMMITTEE on Medical Service and Prepayment Insurance, James B. Blodgett, MD, Chairman, recommended no action on the resolution since the intent had been accomplished through the adoption of Resolution 36.

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 45

Hospital Utilization Review

Introduced by John E. Hauser, MD

Whereas, Resolution 22 of the 1964 House of Delegates of the Michigan State Medical Society authorized the appointment of a fact-finding committee of physicians to evaluate utilization prepaid services rendered in Michigan; and

Whereas, no final report has been submitted by this committee, therefore be it

RESOLVED: That the House of Delegates request that the results of this survey be presented.

THE REFERENCE COMMITTEE on Reports of The Council, Donald N. Sweeny, Jr., MD, Chairman, recommended no action on the resolution since the intent had been accomplished in the Reference Committee action on the annual report of the Committee on Evaluation of Prepaid Medical Services.

THE HOUSE adopted the recommendation of the Reference Committee.

RESOLUTION 46

Driving License Evaluation and Examination

Introduced by R. A. Rasmussen, MD

Whereas, available statistics indicate that a significant precentage of non-fatal and fatal auto accidents are due to driver incapacity or incompetence associated with disease or infirmity (due to physical or mental impairment), and

Whereas, the present driver licensing laws do not provide for interim examination of potentially incapable drivers, and

Whereas, there is no mandatory provision for physicians to report diseases or information on operators of auto vehicles to our authorities so that re-evaluation could be accomplished, and

Whereas, the presence of such licensed drivers, who have a potentially incapacitating disease or infirmity, on our highways constitutes a public hazard, and

Whereas, it is the sense of the Kent County Medical Society that driver re-evaluation at any time a physician finds disease or infirmity which may make a driver a potential hazard is a necessity, therefore be it

RESOLVED: That the Michigan State Medical Society direct its Committee on Highway Accident Prevention to direct its effort toward legislation which will accomplish driver examination and re-evaluation at any time a physician finds same indicated, and be it further

RESOLVED: That physicians be required to report drivers who have a disease or infirmity of a degree constituting a driving hazard so that re-evaluation will be accomplished.

THE REFERENCE COMMITTEE on Legislation and Public Relations, Philip K. Stevens, MD, Chairman, recommended no action at this time and referred the resolution to the MSMS Committee to Study the Prevention of Highway Accidents.

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 47

Activity of the AMA in National Legislation

Introduced by L. Dell Henry, MD

Whereas, there is mounting evidence that the Social Security Amendments (Medicare of 1965) are being questioned by many responsible governmental and private groups, and

Whereas, proposals for the improvement of Medicare are now under active consideration in Washington, and may be for some time, and

Whereas, the American Medical Association has much to offer in this area and would enhance its image by actively proposing constructive Medicare amendments deemed in the best interests of the public and the medical profession, therefore be it

RESOLVED: That the American Medical Association arrange to have constructive legislation improving Medicare introduced to the Congress of the United States immediately, and continue to offer such constructive legislation from time to time.

THE REFERENCE COMMITTEE on Legislation and Public Relations, Philip K. Stevens, MD, Chairman, amended the Resolved portion to read, "RESOLVED: That the American Medical Association promote constructive legislation improving existing governmental health plans and continue to offer constructive advice." The committee recommended approval as amended.

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 48

Nominations for Judicial Commission

Introduced by C. Jackson France, MD

Whereas, the Judicial Commission has general jurisdiction in all matters relating to professional ethics, grievances, mediation and discipline of membership including the authority to make binding interpretations and rules for the component medical society, therefore be it

RESOLVED: That the component medical society be given the right of nominating its candidates to the Judicial Commission, and be it further

RESOLVED, That Chapter 11, Section 3, of the Bylaws be amended as follows: Delete second sentence, add these sentences as second and third sentences: "Such nominating committee shall request nominations from the component societies of each Judicial District of at least twice as many nominees for the office of Judicial Commissioner as are to be elected in such year from such District. If the requisite minimum number of nominees has not been submitted by the component societies by September 15 of each year, the nominating committee shall select from the voting members in good standing in each Judicial District of the Society the additional nominees necessary to fill the minimum requirement."

THE REFERENCE COMMITTEE on Constitution and Bylaws, James D. Fryfogle, MD, Chairman, recommended the resolution be not approved.

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 49

Facilities for the Treatment of Alcoholism

Introduced by John G. Slevin, MD

Whereas, chronic alcoholism is a disease, and

Whereas, it is estimated that more than 200,000 Michigan citizens are chronic alcoholics, and

Whereas, in all of Michigan there are only six hospitals equipped and prepared to give the chronic alcoholic the treatment he or she requires, and

Whereas, the treatment of alcoholics is not only a medical problem but one that involves the safety and welfare of the citizens of Michigan inasmuch as a majority of fatal highway accidents are said to involve drunk drivers, many of whom are chronic alcoholics, therefore be it

RESOLVED: That the Michigan State Medical Society House of Delegates through the Legal Affairs Committee urge the State Legislature to appropriate adequate funds for the care and treatment of chronic alcoholics for the purpose of rehabilitation in appropriate hospitals.

THE REFERENCE COMMITTEE on Legislation and Public Relations, Philip K. Stevens, MD, Chairman, recommended approval of the resolution after amending the third Whereas substituting the words "not enough" for the words "only six."

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 50

Prescribing of Medications

Introduced by W. Kaye Locklin, MD

Whereas, it is in the best interest and safety of the patient for the examining or consulting physician to know the nature of medicines previously prescribed by other physicians, therefore be it

RESOLVED: That the Michigan State Medical Society endorse the policy that all prescribed or dispensed medicines be labeled with either the generic or trade name of the drug, unless specifically contraindicated by the administering physician.

THE REFERENCE COMMITTEE on Miscellaneous Business, Harry A. Towsley, MD, Chairman, agreed with the intent of the resolution but recommended disapproval of the resolution as submitted. In lieu thereof, the Committee proposed that, for the best interests and safety of all concerned, some method of uniform drug identification be explored by the MSMS Liaison Committee with the Michigan State Pharmaceutical Association and that its report be reviewed by The Council of MSMS for implementation if needed.

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 51

Status of Externes

Introduced by Frederick S. Gillett, MD

Whereas, the expanding population will require a larger number of medical students, and

Whereas, excellent community hospital facilities are not being utilized for the training of medical students, and

Whereas, externeships do provide inestimable training in clinical medicine, and

Whereas, the present Medical Practice Act does not give status to the medical student as an externe, and

Whereas, the present Medical Practice Act does not protect the externe, the non-university hospital or the private physician from legal action for invasion of privacy, assault, or other legal entities, not detrimental to the best interests of the patient, therefore be it

RESOLVED: That the Michigan State Medical Society encourage the enactment of legislation to promote the externe concept of clinical training, and provide the necessary legal protection as outlined above.

THE REFERENCE COMMITTEE on Legislation and Public Relations, Philip K. Stevens, MD, Chairman, recommended that the House take no action on the resolution, but that it be referred to the Education Liaison Committee.

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 52

Hospital-Based Physicians

Introduced by Sidney E. Chapin, MD

Whereas, physicians customarily bill their patients directly for their services, and

Whereas, problems have developed concerning direct billing by hospital-based physicians, therefore be it

RESOLVED: That the House of Delegates reaffirm the right of every physician including hospital-based physicians to bill patients for his services irrespective of where these services may be rendered.

THE REFERENCE COMMITTEE on Medical Service and Prepayment Insurance, James B. Blodgett, MD, Chairman, recommended approval of the resolution.

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 53

Qualifications of Members on Judicial Commission

Introduced by Marjorie Peebles Meyers, MD

Whereas, the Committee on Constitution and Bylaws of the House of Delegates of the Michigan State Medical Society has recommended an amendment to provide that members of ethics, grievances or mediation committees or of the governing board of component medical societies may not serve on the Judicial Commission, and

Whereas, dual membership on local ethics committee and the Judicial Commission would provide helpful liaison between the component medical societies and the Judicial Commission, and

Whereas, such a ruling would work a hardship on societies with small membership, and

Whereas, the intent of this proposed amendment, that is, to provide impartial review, can be accomplished without barring a physician from serving concomitantly on his local grievances and ethics committees or governing board and the Judicial Commission, therefore be it

RESOLVED: That the amendment proposed by the Committee on Constitution and Bylaws be not adopted, and be it further

RESOLVED: That the Committee on Constitution and Bylaws be instructed to prepare an amendment to provide that a member of the Judicial Commission shall abstain from voting on any case on which he has previously voted as a member of his component medical society ethics committee or governing board.

THE REFERENCE COMMITTEE on Constitution and Bylaws, James D. Fryfogle, MD, Chairman, recommended that the resolution be not approved.

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 54

Need for Increased Support of Legislative and Economic Activities of MSMS

Introduced by Paul T. Lahti, MD

Whereas, the current legislative year has seen the presentation of and enactment into law of many bills pertaining to the health care of the citizens of our state and nation and to the practice of medicine on a local, state and national level, and

Whereas, the demand for further similar legislation in these areas, much of which will be legitimate and worthy of favorable consideration and support, will inevitably rapidly increase because of recognized social pressures and needs, and

Whereas, the MSMS is the largest and best qualified organization in our state concerned with the health of the citizens of our state, and

Whereas, because of this singular position, the MSMS has a professional and public obligation to be knowledgeable, active and current in the analysis of any legislation presented which will affect the health of said citizens, and

Whereas, the MSMS also has a professional obligation to its 7500 individual members to support, or criticize, legislation which in its professional judgment may directly influence the ability and efficiency of its individual members to render their needed services to the mutual satisfaction of all parties concerned, and

Whereas, experiences in the past legislative year have clearly indicated the importance of close liaison with state and federal legislators and officials, and

Whereas, during the past legislative year the value and efficiency of personal contact between legislators and concerned and informed members of MSMS was amply demonstrated, and

Whereas, the expense of such effective liaison in both time and money has been all too apparent to the faithful few who have endeavored to discharge this obligation on behalf of the Society as a whole, and

Whereas, the 7500 individual members of MSMS have a professional obligation to support the legislative and economic activities of MSMS which functions on behalf of the Society as a whole and in the interests of the health care of the people of the State of Michigan, and

Whereas, such obligations should be considered apart from the personal and political affiliations of each individual member, and

Whereas, it is all too apparent that major legislative battles lie close at hand in such areas as medical education, economics of medical practice and control of medical practice, to name but a few, and

Whereas, it is obvious that the MSMS must take immediate steps to strengthen and expand its activities in the legislative and economic fields, therefore be it

RESOLVED: That additional monies be raised to meet this obvious urgent need, and be it further

RESOLVED: That this money be raised by a $25.00 per annum increase in dues charged to all active members of MSMS, and

That this money so collected be distributed equally among AMPAC (AMA) and MDPAC (MSMS) and at a similar local county level, and

That the money returned at a county level shall be pro-rated on the basis of the number of active Society members in that county, and be it further

RESOLVED: That The Council of MSMS, after appropriate consultation with its legal advisors, Finance Committee and other revelant committees, be authorized ot implement this resolution to take effect for the calendar year 1967.

THE REFERENCE COMMITTEE on Ways and Means, Fred C. Brace, MD, Chairman, recommended disapproval of the resolution because of the compulsory aspect of the raising of funds. The Committee, however, strongly supported the concept of voluntary contributions through MDPAC and AMPAC, and recommended the continuance of the present program of including a request for funds in the annual MSMS dues statement.

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 55

Hospital Privileges

Introduced by George Mogill, MD

Whereas, it is the opinion of the medical profession that every American citizen would benefit from having quality medical care and choice of physician, and

Whereas, at the present time some physicians have difficulty obtaining hospital staff appointments, and

Whereas, today the majority of acute or chronic serious illnesses require hospitalization for proper treatment, therefore be it

RESOLVED: That in the public and professional interest the House of Delegates of the Michigan State Medical Society support the principle of every ethical licensed physician having admitting and staff privileges commensurate with his training and skill in at least one accredited hospital.

THE REFERENCE COMMITTEE on Resolutions, Harold F. Falls, MD, Chairman, recommended approval of the resolution, although the Reference Committee freely admitted it was not capable of proposing methods by which this principle can be implemented, but did hope that the adoption of the resolution would serve as a catalytic agent in evoking action in the near future.

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 56

Commendation to Michigan Blue Shield

Introduced by Donald N. Sweeny, Jr., MD

Whereas, Michigan Blue Shield was formed twenty-six years ago by physicians dedicated to the principle that quality health care must be made available to the greatest number of people at the lowest possible cost, and

Whereas, Michigan Blue Shield has consistently adhered to this principle by striving to deal effectively with the problems of medical economics, and

Whereas, Michigan Blue Shield has vigorously sought to advance the principles of voluntary medicine by maintaining freedom of choice in the physician-patient relationship, and

Whereas, Michigan Blue Shield has demonstrated unchallenged leadership in operating prepayment medical care protection in the best interest of the consumer, therefore be it

RESOLVED: That the Michigan State Medical Society recognize the accomplishments of Michigan Blue Shield at this time, and be it further

RESOLVED: That Michigan Blue Shield continue its efforts to administer more efficiently to aid in developing meaningful techniques of utilization review in cooperation with the profession, to look for effective ways to correct inequities and inadequacies in programs in a manner satisfactory to the consumer, to extend benefit levels and, by so doing, demonstrate again that the mechanism of Blue Shield, coupled with appropriate professional participation, gives the consumer good health care coverage.

THE REFERENCE COMMITTEE on Medical Service and Prepayment Insurance, James B. Blodgett, MD, Chairman, recommended approval of this resolution.

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 57

Feasibility of Rotating Membership of the Judicial Commission Within Districts

Introduced by R. C. Prophater, MD

Whereas, the Judicial Commission was organized to help medical societies of small numbers in all matters relating to ethics, professional conduct, mediation and discipline of members of component societies, therefore be it

RESOLVED: That a study be made as to the feasibility of rotation of members of the Judicial Commission within districts.

THE REFERENCE COMMITTEE on Constitution and By-laws, James D. Fryfogle, MD, Chairman, agreed that such a study should be made and referred the resolution to the Judicial Commission.

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 58

Suture of Lacerations Billing by Blue Shield

Introduced by R. C. Prophater, MD

Whereas, the billing was changed from individual consideration to a set schedule by length without due consideration to other factors and is inequitable, therefore be it

RESOLVED: That the House of Delegates of the Michigan State Medical Society request the corporate body of Blue Shield to evaluate and change to individual consideration billing on suturing of lacerations.

THE REFERENCE COMMITTEE on Medical Service and Prepayment Insurance, James B. Blodgett, MD, Chairman, recommended that the resolution be not approved for the reason that "...whenever Individual Consideration for a laceration suture is desired, this can presently be accomplished by requesting it on the DSR."

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 59

Establishment of an MSMS House of Delegates Committee To Study Resolutions Passed by Other State Medical Society Houses of Delegates

Introduced by Harold F. Falls, MD

Whereas, there does not exist a mechanism whereby there is available for the study and review of resolutions passed by other state houses of delegates, either on a state or national level, and

Whereas, many of these resolutions may contain data and information applicable to medicine in Michigan, therefore be it

RESOLVED: That the Speaker of this House of Delegates appoint a committee assigned the responsibility of collecting and reviewing such resolutions with intent that matters of importance to MSMS be reported to this House in the form of resolutions or reports, and be it further

RESOLVED: That the AMA be petitioned to establish a central agency wherein all resolutions passed by state medical society houses of delegates be deposited and be available for study by all component and county medical societies.

THE REFERENCE COMMITTEE on Miscellaneous Business, Harry A. Towsley, MD, Chairman, recommended approval of the resolution with the following amendments: Change the first Resolved to read, "RESOLVED: That the Speaker of this House of Delegates appoint a committee to be assigned the responsibility of studying the feasibility of collecting and reviewing resolutions passed by other state houses of delegates with the intent that matters of importance to MSMS be reported to this House." The second Resolved was amended by inserting the word "likewise" after "AMA."

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 60

Acceptance of National Board of Medical Examiners Certifications

Introduced by Henry Malcolm, MD

Whereas, the need for more physicians in Michigan is recognized, and

Whereas, reciprocity is permitted with any legally constituted body but not with the National Board of Medical Examiners, and

Whereas, many physicians who have been recruited for medical schools or private practice have gone elsewhere because the National Boards are not recognized, and

Whereas, an amendment to the Michigan Medical Practice Act could enable the Michigan Board of Registration in Medicine to accept the National Board examination in lieu of the present Michigan examination, therefore be it

RESOLVED: That The Council be instructed to have prepared suitable legislation which when passed would permit reciprocity with the National Board of Medical Examiners examinations.

THE REFERENCE COMMITTEE on Legislation and Public Relations, Philip K. Stevens, MD, Chairman, amended the resolution by deleting the second and fourth Whereas, and changing the Resolved portion to read, "RESOLVED: That The Council be instructed to prepare suitable legislation amending the Michigan Medical Practice Act, enabling the Michigan Board of Registration in Medicine to accept the National Board examination as well as the present Michigan examination." The Committee then recommended that the resolution be approved as amended.

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 61

Hospital Staffs and Osteopaths

Introduced by D. B. Hiscoe, MD

Whereas, there is an acute need for more and well qualified physicians, and

Whereas, the current professions of osteopathy and allopathic medicine subscribe to essentially the same philosophy and curriculum, and

Whereas, these points were made before the State House of Representatives Ways and Means Committee by the MSMS in the spring of 1966, therefore be it

RESOLVED: That 1) MD hospitals be encouraged to accept osteopathic graduates as interns; 2) MD staffs be open to doctors of osteopathy; 3) each such applicant be considered on the basis of his individual background and achievement.

THE REFERENCE COMMITTEE on Legislation and Public Relations, Philip K. Stevens, MD, Chairman, considered Resolutions 5, 61 and 63 together.

For Reference Committee and House action, see Resolution 5.

RESOLUTION 62

Repeal of the Basic Science Law

Introduced by D. B. Hiscoe, MD

Whereas, the 1960 House of Delegates passed Substitute Resolution 7 which called for 1961 action to repeal the Basic Science Act, and

Whereas, the 1965 House of Representatives passed such a bill only to have it held in the State Affairs Committee of the Senate until it was dead, and

Whereas, the basic sciences are an important deterring factor in attracting new and qualified physicians to practice and teach in Michigan, therefore be it

RESOLVED: That The Council of the Michigan State Medical Society be hereby instructed by this House of Delegates to have prepared suitable legislation to be introduced into the next legislative session which will repeal the Michigan Basic Science Law.

THE REFERENCE COMMITTEE on Legislation and Public Relations, Philip K. Stevens, MD, Chairman, recommended approval of this resolution.

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 63

Osteopathic Draft

Introduced by Jack M. Stack, MD

Whereas, for ten years Federal legislation has allowed DOs to be commissioned in the US Armed Forces, and

Whereas, in April, 1966, Secretary of Defense NcNamara ordered that this law be implemented, and

Whereas, young MDs throughout the state have been drafted from residencies and private practice to fill the physician needs of the Armed Forces, and

Whereas, the end of the doctor draft is not yet in sight, and

Whereas, the policy of MSMS has been to encourage cooperation with DOs on a local and individual level, and

Whereas, many community hospitals now have joint staffs, and

Whereas, heretofore DO students have obtained student deferment status while in school, therefore be it

RESOLVED: That MSMS House of Delegates recommend to the State Draft Board that it include DOs in subsequent doctor draft calls.

THE REFERENCE COMMITTEE on Legislation and Public Relations, Philip K. Stevens, MD, Chairman, considered Resolutions 5, 61 and 63 together.

For Reference Committee and House action, see Resolution 5.

RESOLUTION 64

Michigan Employment Security Commission Amendment

Introduced by Jack M. Stack, MD

Whereas, prior to January 1, 1966, employers of 1, 2 or 3 employees were not contributors to the MESC fund, and

Whereas, businessmen, physicians and other professionals employing 1, 2 or 3 persons do not frequently lay off their workers, and

Whereas, the new 1965 amendment to include employers of 1, 2 or 3 as contributors is an attempt to obtain revenue for the fund from a source unlikely to draw from such funds, and therefore small businesses are subsidizing the auto, construction and other large industries, therefore be it

RESOLVED: That MSMS and its individual members inform the State Legislature of the inequity of the law, encourage them to re-evaluate the implications and effects that this law has on small business throughout the state, and ask them to revise this portion of the amendment, and be it further

RESOLVED: That the members of MSMS be encouraged to enlist the support of other professionals and small businessmen in their local area to participate in the opposition to this and other such measures designed to tax unfairly this vital but poorly represented segment of our economy.

THE REFERENCE COMMITTEE on Legislation and Public Relations, Philip K. Stevens, MD, Chairman, recommended approval of this resolution as printed.

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 65

Commendation to MAP on FORMULA TV Series

Introduced by Fred Gillett, MD

Whereas, the Michigan Association of the Professions has for more than two years sponsored, produced and presented the program FORMULA over WJIM-TV, Channel 6, Lansing, and

Whereas, this program has appeared as a public affairs feature during prime time, thereby reaching a minimum of ¼ million people each week, and

Whereas, over 50% of these telecasts have presented valuable information on the subject of health and in doing so reflected utmost credit upon the medical profession, therefore be it

RESOLVED: That the Michigan State Medical Society hereby express to the Michigan Association of the Professions its commendation and appreciation for the service it has rendered to the public and the medical profession by the presentation of the FORMULA television series.

THE REFERENCE COMMITTEE on Legislation and Public Relations, Philip K. Stevens, MD, Chairman, recommended approval of the resolution.

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 66

Alcoholism as a Disease Entity

Introduced by Jack Hoogerhyde, MD

Whereas, in 1956 the American Medical Association House of Delegates unanimously passed a resolution declaring alcoholism to be a disease and urged that it be treated as such in general hospitals, and

Whereas, more and more courts across the country recognize this principle, and

Whereas, general hospitals presently are reluctant to admit an alcoholic patient and, consequently, the physician is forced to resort to subterfuge in order to gain patient admission under assorted diagnoses of gastroenteritis, syncope, organic brain syndrome, and so forth, and

Whereas, the federal government recently recognized the diagnosis of alcoholism per se as an admission diagnosis in veterans' hospitals, therefore be it

RESOLVED: That the Michigan State Medical Society House of Delegates approve the recognition of alcoholism as a disease entity, and be it further

RESOLVED: That Michigan Medical Service recognize alcoholism as a disease entity and payment for its care and treatment be included in the fee schedule.

THE REFERENCE COMMITTEE on Medical Service and Prepayment Insurance, James B. Blodgett, MD, Chairman, recommended that this resolution be referred to the MSMS Committee on Mental Health for an opinion.

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 67

Storm Door Injuries

Introduced by L. A. Drolett, MD

Whereas, a growing number of injuries caused by the glass inserts in storm doors is being treated in emergency rooms and doctors' offices, and

Whereas, protective devices now available are extra cost items, not standard equipment and of little value in preventing injuries, and

Whereas, the use of safety glass is not practical because of the excess weight of this type of glass, therefore be it

RESOLVED: That this House of Delegates recommend that the American Medical Association take the initiative in making a study, in cooperation with storm door manufacturers, on the development of safety devices, which would be reasonable in cost, and be it further

RESOLVED: That upon the completion of the study the American Medical Association cause legislation to be introduced in Congress which would require that appropriate safety devices be standard equipment in the manufacture of storm doors.

THE REFERENCE COMMITTEE on Miscellaneous Business, Harry A. Towsley, MD, Chairman, while highly in favor of steps taken in accident prevention, believed the scope of this resolution was too limited and therefore recommended disapproval.

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 68

Annual Report From Michigan Medical Service on Medicare Costs

Introduced by G. Thomas McKean, MD

Whereas, in the forlorn hope that future legislative sessions may recognize the extreme expense to the taxpayer involved in the Medicare and Title XIX programs of Public Law 89-97, and

Whereas, physicians of Michigan (as well as the populace of the U.S.A.) need to be kept informed regarding such expense, therefore be it

RESOLVED: That this House of Delegates request Michigan Medical Service to keep the doctors of Michigan informed annually of administrative expenses involved in these programs, and be it further

RESOLVED: That public relations activities of the Michigan State Medical Society bring such costs regularly to the attention of the citizens of Michigan.

THE REFERENCE COMMITTEE on Medical Service and Prepayment Insurance, James B. Blodgett, MD, Chairman, recommended approval of the resolution.

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 69

Advisory Committee of The Council to the Executive Director

Introduced by C. Jackson France, MD

Whereas, the Secretary and the Treasurer are the only officers of the Society not elected by the House of Delegates, and

Whereas, under Article X of the Constitution the Secretary and Treasurer serve on The Council without power to vote, and

Whereas, under Chapter 10 of the Bylaws the Secretary and Treasurer serve on the Executive Committee of The Council without power to vote, therefore be it

RESOLVED: That Chapter 10, Section 3, Subparagraph (d) of the Bylaws be amended as follows: Delete sentence one. The new sentence one shall read: "The Advisory Committee to the Executive Director shall consist of the President, President Elect, Speaker of the House, Chairman of The Council and Chairman of the Finance Committee. The Chairman of The Council shall be Chairman of the Advisory Committee." The following sentence shall read: "Treasurer and Secretary shall also serve thereon without power to vote."

THE REFERENCE COMMITTEE on Constitution and Bylaws, James D. Fryfogle, MD, Chairman, recommended the resolution be not approved because it was identical with proposed Bylaws changes in the Annual Report of the Constitution and Bylaws Committee.

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 70

Commendation of MDPAC

Introduced by Duane Heilbronn, MD

Whereas, over a quarter of a century ago COPE was organized for action in the political arena with greater success in medical action than we can appreciate, and

Whereas, MDPAC was organized three short years ago, along the same lines as COPE, for political action in medical matters for the benefit of the public and the medical profession, and

Whereas, in spite of a limited budget, effective action has been taken in the political field, therefore be it

RESOLVED: That the MDPAC officers and Board of Directors be commended for their enthusiasm, dedication and effective action, and be it further

RESOLVED: That this commendation be translated by tangible financial support and contribution to MDPAC by members of the Michigan State Medical Society, and be it further

RESOLVED: That the Delegates to the Michigan State Medical Society House of Delegates set the example by 100 per cent participation in MDPAC.

THE REFERENCE COMMITTEE on Legislation and Public Relations, Philip K. Stevens, MD, Chairman, recommended approval of the resolution with amendments to the second and third Resolved portions so they would read as follows:

"RESOLVED: That this commendation be translated by tangible financial support and contribution to MDPAC by individual members of MSMS, and be it further

"RESOLVED: That the delegates to the MSMS House of Delegates set an example by contributing on an individual basis to MDPAC."

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 71

Practicing Physician Representation on All AMA Education Committees

Introduced by H. M. Smathers, MD

Whereas, today's practicing physician has had a varying and considerable postgraduate education, and

Whereas, a large number of such physicians are closely involved in the training of future practicing physicians, and

Whereas, today's physician is familiar with the strengths and weaknesses of present graduate and postgraduate educational programs, and

Whereas, the list of ten members on the recent AMA Citizens Commission on Graduate Medical Education appointed committee which suggests revision of postgraduate education reveals a complete lack of practicing physicians, therefore be it

RESOLVED: That the delegates to the AMA request the Council on Medical Education of the AMA to appoint private practitioners of medicine to at least fifty per cent of the membership of all future education committees.

THE REFERENCE COMMITTEE on Miscellaneous Business, Harry A. Towsley, MD, Chairman, recommended approval of the resolution amended to read as follows:

Whereas, today's practicing physician has had a varying and considerable postgraduate education, and

Whereas, a large number of such physicians are closely involved in the training of future practicing physicians, and

Whereas, today's physician is familiar with the strengths and weaknesses of present graduate and postgraduate educational programs; therefore, be it

RESOLVED: That the Delegates of the Michigan State Medical Society to the American Medical Association reiterate to the Council on Medical Education that it continue its practice of appointing representatives of the private practice of medicine on all of its committees relating to medical education.

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 72

Appropriate Recognition of the Sesquicentennial Celebration of the University of Michigan and its Medical School

Introduced by G. H. Bauer, MD

Whereas, the University of Michigan is this year observing its 150th anniversary with recognition having national and international impact, and

Whereas, the University of Michigan Medical School has been a major force in undergraduate and graduate medical training in this State and nation throughout the existence of this University, and

Whereas, the medical profession of Michigan has shared in many accomplishments of this fine school and is duly aware of the contributions the profession has received from it, therefore be it

RESOLVED: That the House of Delegates of the Michigan State Medical Society hereby offers highest commendation and appreciation to the University of Michigan Medical School and the University of Michigan for valued service over the years to the people of the world and to the profession of medicine, and be it further

RESOLVED: That the President of the Michigan State Medical Society be authorized to publicly present as part of this 150th anniversary celebration a suitably worded scroll or other memento to the Dean of the University of Michigan Medical School or other appropriate University official at a suitable time and place, and be it further

RESOLVED: That the House of Delegates request the MSMS delegates to the American Medical Association to submit a resolution to the AMA House of Delegates inviting attention to the sesquicentennial celebration of the University of Michigan.

THE REFERENCE COMMITTEE on Legislation and Public Relations, Philip K. Stevens, MD, Chairman, recommended approval of the resolution.

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 73

Chiropractic Payment

Introduced by A. Jackson Day, MD

Whereas, under Title XIX, Public Law 89-97, there is a strong possibility that Michigan Medical Service as the fiscal agent for the Act will be required to make payments to chiropractors, therefore be it

RESOLVED: That this House of Delegates inalterably oppose such payments to chiropractors.

THE REFERENCE COMMITTEE on Resolutions, Harold F. Falls, MD, Chairman, recommended approval of this resolution.

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 74

In Consideration of Our Leadership Responsibilities

Introduced by Ralph H. Pino, MD

Whereas, the necessary cost of today's scientific health care requires increasing consideration of the economic, social and political factors of the distribution of health care, and

Whereas, at the 1965 meeting of this House of Delegates we brought up to date from our MSMS experience over three hundred categories of earning groups from the lowest to the highest income brackets, and found percentage-wise that very few people are wealthy, and

Whereas, from our AMA headquarters and all during the month of consideration of the problems of Social Security our AMA leadership proclaimed the opposite of our factual information, and

Whereas, we presented in the 1965 House Resolution No. 54, which was reported out through the Reference Committee and passed, which read as follows:

> "**RESOLVED:** That this House of Delegates of the Michigan State Medical Society ask for the privilege of presenting details of our verified economic records and experiences to our AMA headquarters to be of aid to our leaders at this critical time in their heavy responsibilities."

Whereas, we then spent three days at AMA headquarters studying many factors of that wonderful institution but finding that while they had been claiming the very opposite to our financial findings in their public statements the records from the Department of Economic Medical Research agreed with Michigan's findings, and

Whereas, this resulted in a serious loss of our leadership prestige, and

Whereas, it usually requires from ten to twenty years for our AMA to catch up with developing and progressive programs, except in the fields of scientific medicine, and

Whereas, this mistake has cost us several hundreds of thousands of dollars and created a setback in leadership that no one intended should happen and which can be prevented from happening again; therefore be it

RESOLVED: That the chairman of the Michigan delegates to the AMA be requested to call a special session of its members as early as possible to diagnose our serious inadequacies, and be it further

RESOLVED: That if our delegates to the AMA so wish, they can request that The Council of the State Society convene the full Michigan House of Delegates for briefing and advice in the interest of all concerned.

THE REFERENCE COMMITTEE on Miscellaneous Business, Harry A. Towsley, MD, Chairman, recommended disapproval of this resolution.

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 75

Introduction of Resolutions

Introduced by E. S. Woodworth, MD

Whereas, during the last session of the House of Delegates the rule governing the introduction of new resolutions was modified to exclude such introductions at the fourth meeting, and

Whereas, the Reference Committee on Rules and Order of Business has recommended and the House subsequently approved such a modification for this session of the House by elimination of item 30 from the order of business, and

Whereas, the House of Delegates Committee to Study Procedures of the House of Delegates has recommended no resolutions be introduced after the third meeting of the House, therefore be it

RESOLVED: That the first sentence of Chapter 9, Section 14, of the MSMS Bylaws be modified by deletion of the words "In the last meeting" and in their place the insertion of "After the third meeting."

THE REFERENCE COMMITTEE on Constitution and Bylaws, James D. Fryfogle, MD, Chairman, recommended no action on the resolution because, as stated in the Committee's recommendation on Resolution No. 4, "the time of introduction of resolutions is now adequately controlled by the Committee on Rules and Order of Business."

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 76

Workshops for Members for the House of Delegates

Introduced by Edwin S. Woodworth, MD

Whereas, the House of Delegates Committee to Study Multi-County Medical Societies has recommended "That a better mechanism be devised for the exchange of viewpoints between delegates in the smaller county societies," and

Whereas, this recommendation has been approved by the appropriate reference committee and passed by this House, and

Whereas, the several smaller counties of less than 100 active members represent primarily rural and semi-rural areas with many situations and problems of a common nature, and

Whereas, the widespread geographic representation of these counties prevents at present this needed liaison and exchange of viewpoints, and

Whereas, the present method of Councilor District Conferences prior to the Annual Session of the House of Delegates is inadequate to obtain the liaison between the smaller county societies, therefore be it

RESOLVED: That the Michigan State Medical Society be requested to establish an annual mid-year Delegate Workshop for the delegates and alternates of those counties who qualify for one or two delegates under the MSMS Bylaws, and be it further

RESOLVED: That the purpose of these workshops shall be the exchange of viewpoints on mutual problems by the counties represented and the exploration of appropriate means by which these problems may be resolved, and be it further

RESOLVED: That the workshops be held at MSMS headquarters in East Lansing and the facilities of the MSMS staff be made available.

THE REFERENCE COMMITTEE on Miscellaneous Business, Harry A. Towsley, MD, Chairman, recommended approval of the resolution after amendment by deleting the original resolved portions and substituting the following:

"RESOLVED: That The Council of MSMS explore and implement a more satisfactory means of communication of Society business at the district level, and that it develop to this end an Annual Delegate Workshop for the delegates and alternate delegates of those counties who qualify for one or two delegates under the MSMS Bylaws, and for other interested members of the House; and be it further

"RESOLVED: That the purpose of these workshops shall be the exchange of viewpoints on mutual problems by the counties represented; and be it further

"RESOLVED: That said workshops be arranged to be held on the day of, but prior to, the opening of the Annual Session of the House of Delegates; and be it further

"RESOLVED: That The Council refer to an appropriate committee the task of developing, with the assistance of members of the MSMS staff, an agenda and format for said workshop."

THE HOUSE adopted the report of the Reference Committee.

RESOLUTION 77

Honorary Membership

Introduced by F. C. Brace, MD

Whereas, Chapter 2, Section 2 of the Bylaws of the Michigan State Medical Society provides that the House of Delegates, upon recommendation of a component county society, may elect a person an honorary member of the Society, and

Whereas, the Kent County Medical Society is proud to host the 101st Annual Meeting of the Michigan State Medical Society in the City of Grand Rapids, and

Whereas, for a full decade, the House of Delegates, the Michigan State Medical Society Council, most committees, and many individual members of the Michigan State Medical Society have had the rare privilege of associating with and benefiting from the wise counsel of one of Michigan's most eminent jurists, a man who has always given unstintingly of his great talents, knowledge, energies and enthusiasm for the benefit of the medical profession, now therefore be it

RESOLVED: That this House of Delegates, upon the hearty recommendation of the Kent County Medical Society, confer honorary membership in the Michigan State Medical Society upon the Legal Counsel of the Michigan State Medical Society:

LESTER P. DODD, JD

and be it further

RESOLVED: That a suitable copy of this resolution be presented to Dr. Dodd as a lasting memento of the great esteem and affection in which he is held by all.

THE HOUSE suspended the rules for the purpose of giving the resolution immediate consideration, and adopted the resolution by a rising, unanimous vote.

RESOLUTION 78

Commendation

Introduced by William L. Brosius, MD

Whereas, Sidney Adler, MD, has retired as President of Michigan Medical Service, and

Whereas, he has rendered long and valuable service to the people and the medical profession of Michigan in his capacity as President of Blue Shield; therefore be it

RESOLVED: That this House of Delegates hereby recognize the six years of exemplary service he has rendered to Michigan Medical Service and express to him our appreciation; and be it further

RESOLVED: That a copy of this resolution be presented to Doctor Adler.

THE HOUSE suspended the rules for the purpose of giving the resolution immediate consideration, and adopted the resolution by a rising vote.

SPECIAL MEMBERSHIPS

THE REFERENCE COMMITTEE on Special Memberships, R. C. Rowan, MD, Chairman, recommended approval of the following special memberships as recommended by the component medical societies and certified by the Secretary of MSMS in accordance with the Bylaws revised in 1965:

Life Memberships

Barry County — Alexander B. Gwinn, MD.

Bay County — Arthur D. Allen, MD; George M. Brown, MD; Robert H. Criswell, MD.

Genesee County — Harold F. Grover, MD; Oliver C. Pratz, MD; Donald R. Wright, MD.

Huron County — Charles I. Herrington, MD.

Ingham County — Corydon F. DeVries, MD; Joseph K. Heckert, MD; C. Ray McCorvie, MD, Theodore P. VanderZalm, MD.

Jackson County — G. Rex Bullen, MD; John Ludwig, MD; Leonard F. Thalner, MD.

Kent County — Dewey R. Heetderks, Sr., MD; Cullen E. Sugg, MD; Jay D. Vyn, MD.

Monroe County — Florence D. Ames, MD; C. D. Barrett, Sr., MD; John H. McMillin, MD.

Muskegon County — Frank W. Garber, MD; Leland E. Holly, MD; William M. LeFevre, MD.

Saginaw County — William K. Anderson, MD; Herbert G. Kleekamp, MD.

Shiawassee County — Chester J. Richards, MD; Claude L. Weston, MD; William F. Weinkauf, MD.

Washtenaw County — L. Dell Henry, MD.

Wayne County — Virginia M. Benson, MD; Bernard M. Bernbaum, MD; J. Payne Butler, MD; Elmer H. Carroll, MD; John H. Cobane, MD; Cornelius E. Dunn; Lawrence S. Fallis, MD; William J. Fulton, MD; George E. Guinan, MD; Arthur E. Hammond, MD; Joseph Hickey, MD; Roy D. Jones, MD; Joseph A. Kasper, MD; Joseph L. Kubanek, MD; Harold Lampman, MD; Arthur G. Liddicoat, MD; Ezra Lipkin, MD; William L. Lowrie, MD; Howard W. MacFarlane, MD; Earle D. MacKenzie, MD; Henry J. Naud, MD; Galen B. Ohmart, MD; A. Hazen Price, MD; Ivor E. Reed, MD; Hector J. St. Amour, MD; Sarah S. Schooten, MD; Henry L. Smith, MD; Linwood W. Snow, MD; Daniel M. Stiefel, MD; Neil J. Whalen, MD.

Retired Memberships

Allegan County — Wilber C. Medill, MD.

Calhoun County — Warren M. Dodge, Jr., MD; H. M. Shellenberger, MD; Lloyd E. Verity, MD.

Genessee County — Delbert M. MacGregor, MD; Nan D. Wolcott, MD.

Gratiot County — E. J. Brenner, MD.

Ingham County — David P. Phillips, MD.

Kent County — David B. Davis, MD.

Monroe County — Edward W. Laboe, MD.

Oakland County — Fred T. Reid, MD.

Saginaw County — Donald C. Durman, MD; Richard D. Mudd, MD.

St. Clair County — J. Raleigh Ware, MD.

Washtenaw County — John L. Law, MD.

Wayne County — Paul L. Fraiberg, MD; August E. Gehrke, MD; Homer L. Johnson, MD; Raymond B. Kraft, MD; Earl F. Lutz, MD; Howard P. Staub, MD.

Associate Memberships

The list of candidates for Associate Members from Washtenaw was reviewed. Since all candidates are doctors of medicine, no action is required by the House of Delegates inasmuch as they may become Associate Members of this Society upon application and certification by the secretary of their component medical society.

THE HOUSE adopted the report of the Reference Committee.

PRESENTATIONS AND AWARDS

CERTIFICATES OF COMMENDATION

Secretary McGillicuddy presented the following Certificates of Commendation as authorized by the House of Delegates:

Arthur C. Curtis, M.D., Ann Arbor —

"In recognition of his distinguished career in internal medicine and specifically for his twenty years as Chairman of the University of Michigan Department of Dermatology and for able leadership in many state and national medical organizations."

Lionel L. Davis, M.D., Mt. Pleasant —

"In recognition of his distinguished career as physician and surgeon at Mt. Pleasant for more than thirty years, and also for his dedicated leadership to provide medical facilities for his community."

Mark Marshall, M.D., Ann Arbor —

"In recognition of his distinguished career in internal medicine for more than half a century in Ann Arbor and also for his generous guidance to medical students, interns, residents and young physicians at St. Joseph Mercy Hospital, Ann Arbor."

Harold J. Meier, M.D., Coldwater —

"In recognition of his distinguished service as a practicing physician and surgeon at Coldwater for thirty years, and also for his outstanding contributions as a leader of the Branch County Medical Society and as a former Chairman of the Michigan State Medical Society Council."

Ralph H. Pino, M.D., Detroit —

"In recognition of his distinguished career as an ophthalmologist, Wayne County Medical Society leader, Wayne State University Professor Emeritus, Michigan Health Council leader in health career recruitment, and one of the founders of Michigan Medical Service."

Alfred B. Swanson, M.D., Grand Rapids —

"In recognition of his unselfish contributions to international health, and specifically his three trips to teach and provide medical surgical care to the people in South Vietnam and help to establish a policy on immunization program there."

Harry A. Towsley, M.D., Ann Arbor —

"In recognition of his distinguished career as a nationally recognized pediatrician, innovator of postgraduate medical education programs, University of Michigan educator, and effective leader in the Michigan State Medical Society and also many state and national medical and welfare organizations."

MICHIGAN'S OUTSTANDING PHYSICIAN

Secretary McGillicuddy presented to Mrs. William A. Hyland, as authorized by the House of Delegates, the following posthumous award to William A. Hyland, MD, Grand Rapids, as Michigan's Outstanding Physician of 1966:

"The Michigan State Medical Society presents its Outstanding Physician Award to William A. Hyland, MD, in recognition of his distinguished career in medicine, the Church, in education, business and community service; and in appreciation for lasting contributions to his country, state and national medical associations.

"As Past President of the Kent County Medical Society in 1930 and of the Michigan State Medical Society in 1946, and as the long-time Treasurer of MSMS, Dr. Hyland served with distinction, dedication and dignity.

"As delegate to the American Medical Association and Chairman of the MSMS delegation, he chairmanned several AMA committees and was responsible for the reorganization of the AMA headquarters administration in 1957.

"A highly respected surgeon in Grand Rapids and environs, Dr. Hyland received many awards in recognition of his many years of inspiring leadership to all levels of Cancer Society work.

"Because he lived, many who would have been lost continue to contribute their full share to civilization's march."

FIFTY YEAR AWARDS

Secretary McGillicuddy presented the Fifty Year Award to the following:

Lona B. Carroll, MD, Wayne County
Schuyler O. Cotton, MD, Wayne County
John C. Foshee, MD, Kent County
L. D. Funk, MD, Calhoun County
Harry H. Goldberg, MD, Wayne County
Walter J. Jaracz, MD, Kent County
W. H. M. Johnson, MD, Wayne County
John J. Miller, MD, Kent County
David P. Phillips, MD, Ingham County
Ralph H. Pino, MD, Wayne County
Edgar E. Poos, MD, Wayne County
Wm. W. Stevenson, MD, Genesee County
Jay D. Vyn, MD, Kent County
S. M. Wells, MD, Kent County
William Westrate, Sr., MD, Ottawa County

Doctor McGillicuddy read the following names of Fifty Year Awardees who were unable to be present:

Ralph V. Allen, MD, Kent County
Harry J. Burkholder, MD, Alpena County
Karl A. Anderson, MD, Kent County
Effie Arnold, MD, Wayne County
Wesley M. Burling, MD, Kent County
Don A. Cohoe, MD, Wayne County
Margarete Coleman, MD, Wayne County
Frederick E. Dodds, Genesee County
Owen C. Foster, MD, Wayne County
Winfred B. Harm, MD, Wayne County
Joseph D. Heaslip, MD, Barry County
Harold Heffron, MD, Lenawee County
Thomas J. Heldt, MD, Wayne County
Harold Henderson, MD, Wayne County
Fred L. Honhart, MD, Wayne County
Arthur Isaacson, MD, Wayne County
Hubert R. John, MD, Wayne County
Charles E. Lemmon, MD, Wayne County
Traian Leucutia, MD, Wayne County
Charles T. Lewis, MD, Wayne County
Edwin H. Lorentzen, MD, Wayne County
Vincent S. Mancuso, MD, Wayne County
O. W. Mitton, MD, Calhoun County
Arthur H. Naylor, MD, Wayne County
George G. Rieckhoff, MD, Wayne County
Ara D. Sharp, MD, Calhoun County
Louis D. Stern, MD, Wayne County
Charles K. Stulik, MD, Berrien County
Bertrand G. Switzer, MD, Wayne County
Eugene Thornton, MD, Muskegon County
Charles L. Tomsu, MD, Wayne County
William R. Vis, MD, Kent County
Herbert O. Westervelt, MD, Berrien County

SPECIAL AWARD

Speaker Lightbody presented the following plaque to D. Bruce Wiley, MD, Utica, recently resigned Secretary of MSMS:

"Presented by the House of Delegates of the Michigan State Medical Society to D. Bruce Wiley, MD, in deep appreciation and grateful recognition of distinguished service rendered to medicine, and for outstanding accomplishments in behalf of his profession and the public."

EMPLOYEE AWARDS

Secretary McGillicuddy announced that by action of the House of Delegates in 1961 the employees of the headquarters staff of the Michigan State Medical Society were to receive awards for certain tenure of employment. The following awards were presented by Secretary McGillicuddy:

Hugh W. Brenneman—20 years of service
Lester P. Dodd—10 years of service
C. T. Hardwick—5 years of service
Richard M. Campau—5 years of service

GUEST SPEAKER

Mayor C. H. Sonneveldt of Grand Rapids addressed the House of Delegates on Sunday evening, welcoming the Delegates to Grand Rapids and describing the city's recent progress.

TRIBUTE TO DECEASED FORMER MEMBERS OF THE HOUSE OF DELEGATES

Secretary McGillicuddy read the following names, and the members of the House arose and stood in silent tribute to their memory:

Paul O. Rague, MD—Berrien County
G. W. Brainard, MD—Calhoun County
O. H. Bruegel, MD—Ingham County
J. S. Rozan, MD—Ingham County
K. W. Toothaker, MD—Ingham County
Charles R. Dengler, MD—Jackson County
J. D. Van Schoick, MD—Jackson County
William A. Hyland, MD—Kent County
Ellery A. Oakes, MD—Manistee County

Russell A. Springer, MD—St. Joseph County
T. G. Amos, MD, Wayne County
Douglas Donald, MD—Wayne County
Ralph Kernkamp, MD—Wayne County
David I. Sugar, MD—Wayne County
Clair F. Vale, MD—Wayne County

ELECTIONS

The following Officers and Councilors were elected:

President-Elect—Bradley M. Harris, MD, Ypsilanti

Speaker—James J. Lightbody, MD, Detroit

Vice-Speaker—Louis F. Hayes, MD, Gaylord

Councilors (3-year terms)—
1st District: Sidney Adler, MD, Detroit
2nd District: Ross V. Taylor, MD, Jackson
3rd District: Harvey C. Hansen, MD, Battle Creek
9th District: Robert V. Daugharty, MD, Cadillac
11th District: Brooker L. Masters, MD, Fremont
13th District: J. Robert Franck, Jr., MD, Wakefield
14th District: Harold F. Falls, MD (to fill unexpired term to 1967)

Delegates to the American Medical Association
(January 1, 1968, to December 31, 1969)
Joseph A. Witter, MD, Detroit
Sidney Adler, MD, Detroit
Donald N. Sweeny, Jr., MD, Detroit
George W. Slagle, MD, Battle Creek

Delegate to the American Medical Association (to fill vacancy for term expiring December 31, 1967)
Otto K. Engelke, MD, Ann Arbor (replacing William A. Hyland, MD).

Alternate Delegates to the American Medical Association
(January 1, 1968, to December 31, 1969)
(in order of seniority)
James C. Danforth, MD, Detroit
John J. Coury, MD, Port Huron
Marjorie P. Meyers, MD, Detroit
Vernon V. Bass, MD, Saginaw

Alternate Delegate to the American Medical Association
(to fill vacancy for term expiring December 31, 1967)
Harold A. Furlong, MD, Pontiac (replacing Otto K. Engelke, MD, elected Delegate).

DIRECTORY

1966 MSMS House of Delegates

RECORD OF ATTENDANCE

	Meetings				
	1st	2nd	3rd	4th	5th
OFFICERS					
James J. Lightbody, MD, Detroit, Speaker	X	X	X	X	X
Louis F. Hayes, MD, Gaylord, Vice-Speaker	X	X	X	X	X
Oliver B. McGillicuddy, MD, Lansing Immediate Past President and Secretary	X	X	X	X	X
DELEGATES					
ALLEGAN					
Gerald Vander Voord, MD, Wayland	X	X	—	X	X
ALPENA-ALCONA-PRESQUE ISLE					
Frederick C. O'Dell, MD, Alpena	X	—	X	X	X
BARRY					
Robert J. Huebner, MD, Hastings	X	X	X	—	X
BAY-ARENAC-IOSCO					
William G. Gamble, Jr., MD, Bay City	X	X	X	X	X
Robert C. Prophater, MD, Bay City	X	X	—	X	X
BERRIEN					
Frederick H. Lindenfield, MD, Niles	X	X	X	X	X
F. Alan Kennedy, MD, Benton Harbor	X	X	X	X	X
BRANCH					
Robert M. Leitch, MD, Union City	X	X	X	X	X
CALHOUN					
George T. Kelleher, MD, Battle Creek	X	—	X	X	X
Russell C. Rowan, MD, Albion	X	X	X	X	X
Keith S. Wemmer, MD, Battle Creek	X	X	X	X	X
CASS					
Henry V. Guzzo, MD, Dowagiac	X	X	X	X	X
CHIPPEWA-MACKINAC					
Donald D. Finlayson, MD, Sault Ste. Marie	X	X	X	X	X
CLINTON					
Franklin W. Smith, MD, St. Johns	X	X	X	X	X
DELTA-SCHOOLCRAFT					
Merle E. Wehner, MD, Manistique	X	X	X	X	X
DICKINSON-IRON					
Donald T. Anderson, MD, Iron Mt.	X	X	X	X	—
EATON					
Byron P. Brown, MD, Charlotte	X	X	X	X	X
GENESEE					
Franklin W. Baske, MD, Flint	X	X	X	X	—
Lawrence G. Bateman, MD, Flint	X	X	X	X	—
H. Maxwell Golden, MD, Flint	X	X	X	X	—
Ernest P. Griffin, MD, Flint	X	X	X	X	X
John Quin, Jr., MD, Flint	X	X	X	—	—
Lewis E. Simoni, MD, Flint	X	X	X	—	—
Philip K. Stevens, MD, Flint	X	X	X	X	—
GOGEBIC					
J. Robert Franck, Jr., MD, Wakefield	X	X	X	X	X
GRAND TRAVERSE-LEELANAU-BENZIE					
Frank H. Power, MD, Traverse City	X	X	X	X	—
GRATIOT-ISABELLA-CLARE					
John M. Wood, MD, Mt. Pleasant	X	X	X	X	X
HILLSDALE					
Clark B. Smith, MD, Hillsdale	X	X	—	X	X
HOUGHTON-BARAGA-KEWEENAW					
Kenneth E. Rowe, MD, Calumet	X	X	X	X	X
HURON					
Charles W. Oakes, Jr., MD, Harbor Beach	X	X	X	X	X
INGHAM					
Lawrence A. Drolett, MD, Lansing	X	X	X	X	X
Herbert W. Harris, MD, Lansing	X	X	X	X	X
D. Bonta Hiscoe, MD, Lansing	X	X	X	X	X
Henry E. Malcolm, MD, Lansing	X	X	X	X	X
Robert M. Stow, MD, Lansing	X	X	X	X	X
IONIA-MONTCALM					
Robert E. Rice, MD, Greenville	X	X	X	X	X
JACKSON					
Harold L. Oster, MD, Jackson	X	X	X	—	X
Francis P. McQuillan, MD, Jackson	X	—	X	—	X
KALAMAZOO					
Wm. G. Birch, MD, Kalamazoo	X	X	X	X	X
W. Kaye Locklin, MD, Kalamazoo	X	X	X	—	X
Frederick J. Margolis, MD, Kalamazoo	X	X	—	—	—
A. John Neerken, MD, Kalamazoo	X	X	X	X	X

	Meetings				
	1st	2nd	3rd	4th	5th
KENT					
Harvey M. Andre, MD, Grand Rapids	X	X	X	X	X
Noyes L. Avery, Jr., MD, Grand Rapids	X	X	X	X	X
Fred C. Brace, MD, Grand Rapids	X	X	X	X	X
Frederick S. Gillett, MD, Grand Raids	X	X	X	X	X
Jack Hoogerhyde, MD, Grand Rapids	X	X	X	X	X
Victor A. Notier, MD, Grand Rapids	X	X	X	X	X
Richard A. Rassmussen, MD, Grand Rapids	X	X	X	X	X
Allison R. VanderBerg, MD, Grand Rapids	X	X	X	X	—
Kornelius Van Goor, MD, Grand Rapids	X	X	X	X	—
LAPEER					
James R. Doty, MD, Lapeer	X	X	X	X	—
LENAWEE					
Marvin B. Wolf, MD, Adrian	X	X	X	X	X
LIVINGSTON					
Edwin S. Woodworth, MD, Howell	X	X	X	—	—
LUCE					
Bernard G. Keizer, MD, Newberry	—	—	—	—	X
MACOMB					
Charles M. Ebner, MD, St. Clair Shores	X	X	X	X	X
Peter V. Kane, MD, Mt. Clemens	X	X	X	X	—
Sydney Scher, MD, Mt. Clemens	X	X	X	—	—
Edward G. Siegfried, MD, Mt. Clemens	X	X	X	X	—
MANISTEE					
Marlowe L. Schwartz, MD, Onekama	X	X	X	X	X
MARQUETTE-ALGER					
George M. Wilson, MD, Marquette	X	X	X	X	X
MASON					
Wm. F. Sutter, MD, Ludington	X	X	X	—	—
MECOSTA-OSCEOLA-LAKE					
James L. Tyson, MD, Big Rapids	X	X	X	X	X
MENOMINEE					
Herman R. Brukardt, MD, Menominee	X	X	X	X	X
MIDLAND					
V. A. Marks, MD, Midland	X	X	X	X	X
MONROE					
S. Newton Kelso, Jr., MD, Monroe	—	X	X	X	—
MUSKEGON					
Robert J. Fles, MD, Muskegon	X	X	X	X	X
Leland E. Holly, II, MD, Muskegon	X	X	X	X	X
H. Clay Tellman, MD, Muskegon	X	X	—	X	X
NEWAYGO					
J. Paul Klein, MD, Fremont	X	X	X	X	X
NORTH CENTRAL					
Charles Oppy, MD, Roscommon	X	X	X	—	—
NORTHERN MICHIGAN					
Thomas R. Kirk, MD, Petoskey	X	X	X	X	X
OAKLAND					
Bruce D. Bauer, MD, Hazel Park	X	X	X	X	X
Shelby M. Baylis, MD, Pontiac	X	X	X	X	X
Carl H. Birkelo, MD, Drayton Plains	X	X	X	X	X
Arnold L. Brown, MD, Pontiac	X	X	X	X	X
Edward E. Elder, Jr., MD, Pontiac	X	X	X	X	X
Harold A. Furlong, MD, Pontiac	X	X	—	—	X
Richard R. Galpin, MD, Pontiac	—	—	—	—	X
Paul T. Lahti, MD, Royal Oak	X	X	X	X	X
John H. McLaughlin, MD, Birmingham	X	X	X	X	X
James R. Quinn, MD, Pontiac	X	X	X	X	X
F. Michael Sheridan, MD, Royal Oak	X	X	X	X	X
OCEANA					
John J. Vrbanac, MD, Hart	X	X	X	X	X
ONTONAGON					
James P. Strong, MD, Ontonagon	X	X	X	X	X
OTTAWA					
Wm. N. Rottschaefer, MD, Holland	X	X	X	X	X
SAGINAW					
Vernon V. Bass, MD, Saginaw	X	X	X	—	—
Duane B. Heilbronn, MD, Saginaw	X	X	X	X	X
Robert J. Toteff, MD, Saginaw	X	X	X	X	X
ST. CLAIR					
Anthony G. Gholz, MD, Port Huron	—	X	X	X	X
James H. Tisdel, MD, Port Huron	X	X	—	X	X
ST. JOSEPH					
Stanley C. Penzotti, MD, Three Rivers	X	X	X	X	X

	Meetings				
	1st	2nd	3rd	4th	5th
SANILAC					
Keate T. McGunegle, MD, Sandusky	X	—	X	X	—
SHIAWASSEE					
Claude L. Weston, MD, Owosso	X	X	X	X	X
TUSCOLA					
Edward J. Miles, MD, Caro	X	X	X	X	X
VAN BUREN					
Edwin H. Terwilliger, MD, South Haven	X	X	X	X	X
WASHTENAW					
Gerhard H. Bauer, MD, Ann Arbor	X	X	X	X	—
Howard R. Williams, MD, Ann Arbor	—	—	—	—	X
Clarence E. Crook, MD, Ann Arbor	X	X	X	X	X
Harold F. Falls, MD, Ann Arbor	X	X	X	X	X
Stuart M. Gould, MD, Ann Arbor	X	X	X	X	X
L. Dell Henry, MD, Ann Arbor	X	X	X	X	X
Beverly C. Payne, MD, Ann Arbor	X	X	X	X	X
Henry A. Scovill, MD, Ypsilanti	X	X	X	X	X
Harry A. Towsley, MD, Ann Arbor	X	X	X	X	X
WAYNE					
Sidney Adler, MD, Detroit	X	X	X	X	X
Charles P. Anderson, MD, Detroit	X	X	X	X	X
Raymond J. Barrett, MD, Detroit	X	X	—	X	X
Frank B. Bicknell, MD, Detroit	X	X	X	—	—
Alexander Blain, III, MD, Detroit	X	X	X	X	X
James B Blodgett, MD, Detroit	X	X	X	X	X
Z. Stephen Bohn, MD, Detroit	X	X	X	X	X
George T. Bradley, MD, Detroit	X	X	X	X	X
Wm. L. Brosius, MD, Detroit	X	X	X	X	X
Brock F. Brush, MD, Detroit	X	X	X	—	—
Louis Carbone, MD, Detroit	—	—	—	—	—
Fred E. Caumartin, MD, Detroit	X	X	X	X	X
Sidney E. Chapin, MD, Dearborn	X	X	X	X	X
Wyman C. C. Cole, Jr., MD, Detroit	X	X	X	X	X
Paul J. Connolly, MD, Detroit	X	X	X	X	X
James C. Danforth, MD, Detroit	X	X	X	X	X
Charles E. Darling, MD, Detroit	X	—	X	X	X
A. Jackson Day, MD, Detroit	X	X	X	X	X
Laurel S. Eno, MD, Detroit	X	X	X	X	X
Lee E. Feldkamp, MD, Plymouth	X	X	X	X	X
Harold B. Fenech, MD, Detroit	X	X	X	X	X
C. Jackson France, MD, Detroit	X	X	X	X	—
James D. Fryfogle, MD, Southfield	X	X	X	X	X
Robert H. Hamburg, MD, Detroit	X	X	—	—	X
John E. Hauser, MD, Southfield	X	X	X	X	—
Louis E. Heideman, MD, Detroit	X	X	X	—	X
Homer A. Howes, MD, Detroit	X	X	—	—	X
H. Ross Hume, MD, Detroit	X	X	X	X	X
Eli J. Igna, MD, Detroit	X	X	X	—	—
Benjamin Jeffries, MD, Harper Woods	X	X	X	X	X
Harry Y. Kasabach, MD, Detroit	X	X	X	X	X
James M. Kennary, MD, Detroit	X	X	X	X	X
Walter F. Kujowski, MD, Detroit	X	X	—	—	—
Arthur B. Levant, MD, Detroit	X	X	X	X	X
James J. Lightbody, MD, Detroit	X	X	X	X	X
Sherwin J. Lutz, MD, Detroit	—	—	—	—	—
E. Clarkson Long, MD, Detroit	—	—	—	X	X
Clarke M. McColl, MD, Detroit	X	X	X	X	X
G. Thomas McKean, MD, Detroit	X	X	X	X	—
Marjorie P. Meyers, MD, Detroit	X	X	X	X	X
George Mogill, MD, Detroit	X	X	X	X	X
John W. Moses, MD, Detroit	X	X	X	X	—
Mario A. Petrini, MD, Detroit	X	X	—	—	—
Ralph H. Pino, MD, Plymouth	X	X	X	X	X
George L. Reno, MD, Detroit	X	X	X	X	X
Francis P. Rhoades, MD, Detroit	X	X	X	X	X
John W. Sigler, MD, Detroit	X	X	X	X	X
John G. Slevin, MD, Detroit	X	X	X	X	X
Homer M. Smathers, MD, Detroit	X	X	X	X	X
Frank B. Walker, MD, Grosse Pte	X	X	X	X	X
Fred W. Whitehouse, MD, Detroit	X	X	X	X	X
Irvin A. Wilner, MD, Detroit	X	X	X	X	X
Joseph A. Witter, MD, Detroit	X	X	X	—	X
Wm. J. Yott, MD, Detroit	X	X	X	X	X
Alfred H. Whittaker, MD, Detroit	X	X	X	X	—
WEXFORD-MISSAUKEE					
Dennis Van Alst, MD, Cadillac	X	X	X	X	X
ALLERGY AND APPLIED IMMUNOLOGY					
James A. McLean, MD, Ann Arbor	X	X	X	X	X
ANESTHESIOLOGY					
Ralph F. Askam, MD, Muskegon	X	X	X	—	X
DERMATOLOGY					
Robert J. Schoenfeld, MD, Birmingham	X	—	—	—	—
GASTROENTEROLOGY					
Joseph A. Rinaldo, Jr., MD, Kalamazoo	X	—	X	X	—
GENERAL PRACTICE					
Douglas A. Haddock, MD, Kalamazoo	X	X	X	X	X
GYNECOLOGY AND OBSTETRICS					
Philip S. Peven, MD, Detroit	X	X	—	—	—

	Meetings				
	1st	2nd	3rd	4th	5th
INTERNAL MEDICINE					
Carl B. Beeman, MD, Grand Rapids	—	—	—	—	—
NEUROLOGICAL SURGERY					
Austin E. Lamberts, MD, Grand Rapids	X	X	X	X	X
OCCUPATIONAL MEDICINE					
Martin F. Bruton, MD, Detroit	—	—	—	—	—
OPHTHALMOLOGY AND OTOLARYNGOLOGY					
James L. Frey, MD, Detroit, Opth	—	—	—	—	—
G. Don Albers, MD, Grand Rapids, Oto	—	—	—	—	—
ORTHOPEDIC SURGERY					
Hira E. Branch, MD, Flint	X	X	X	X	X
PATHOLOGY					
Robert C. Horn, Jr., MD, Detroit	—	—	—	—	—
PEDIATRICS					
Robert J. McGillicdddy, MD, Lansing	X	X	X	X	X
PLASTIC SURGERY					
Ralph Blocksma, MD, Grand Rapids	—	—	—	—	—
PROCTOLOGY					
Donald J. Pearson, MD, Battle Creek	X	X	X	X	—

	Meetings				
	1st	2nd	3rd	4th	5th
PSYCHIATRY AND NEUROLOGY					
No Delegate Selected					
PUBLIC HEALTH AND PREVENTIVE MEDICINE					
Oscar D. Stryker, MD, Mt. Clemens	—	—	—	—	—
G. Fred Moench, MD, Sanford	—	—	—	—	—
RADIOLOGY					
B. Van Zwalenburg, MD, Grand Rapids	X	X	X	X	X
SURGERY					
John W. Derr, MD, Detroit	X	X	X	X	X
UROLOGY					
Murray S. Mahlin, MD, Detroit	—	—	—	—	—
MEDICAL STUDENTS					
Lee Britton, Ann Arbor	X	X	X	—	—
Nelson Gantz, Detroit	X	X	X	X	X
Terry Hargreve, Detroit	X	—	X	X	X
Stephen F. Larned, Detroit	X	—	—	—	—
Robert Levine, Detroit	X	X	X	X	X
Richard Livesay, Ann Arbor	X	X	X	X	X
Jack Mason, Ann Arbor	X	X	X	—	—
Ronald Mulder, Ann Arbor	—	X	X	X	X
James Tashjian, Detroit	X	X	X	X	X
Kenneth Wilhelm, Ann Arbor	X	X	X	—	—
Peter Wong, Detroit	X	—	X	X	—

REFERENCE COMMITTEES

CONSTITUTION AND BYLAWS

J. D. Fryfogle, MD, Chairman, Wayne
C. E. Darling, MD, Wayne
E. P. Griffin, MD, Genesee
W. K. Locklin, MD, Kalamazoo
F. P. McQuillan, MD, Jackson
F. P. Rhoades, MD, Wayne

Councilor Advisor:

R. V. Daugharty, MD, Cadillac

CREDENTIALS

S. C. Penzotti, MD, Chairman, St. Joseph
M. E. Wehner, MD, Delta-Schoolcraft

EMERGENCY MEDICAL SERVICE

C. J. France, MD, Chairman, Wayne
G. H. Bauer, MD, Washtenaw
A. W. Blain, MD, Wayne
W. C. C. Cole, Jr., MD, Wayne
E. J. Miles, MD, Tuscola
William Rottschaefer, MD, Ottawa

Councilor Advisor:

H. C. Hansen, MD, Battle Creek

EXECUTIVE SESSION

R. J. Toteff, MD, Chairman, Saginaw
I. A. Wilner, MD, Wayne

HYGIENE AND PUBLIC HEALTH

J. G. Slevin, MD, Chairman, Wayne
F. W. Baske, MD, Genesee
B. E. Brush, MD, Wayne
R. M. Leitch, MD, Branch
F. H. Power, MD, Grand Traverse-Leelanau-Benzie
G. L. Reno, MD, Wayne

Councilor Advisors:

B. L. Masters, MD, Fremont
R. R. Cooper, MD, Grosse Pointe

LEGISLATION AND PUBLIC RELATIONS

P. K. Stevens, MD, Chairman, Genesee
N. L. Avery, Jr., MD, Kent
D. B. Hiscoe, MD, Ingham
H. Y. Kasabach, MD, Wayne
G. T. McKean, MD. Wayne
R. H. Pino, MD, Wayne

Councilor Advisor:

B. M. Harris, MD, Ypsilanti

MEDICAL SERVICE AND PREPAYMENT INSURANCE

J. B. Blodgett, MD, Chairman, Wayne
S. E. Chapin, MD, Wayne
A. J. Day, MD, Wayne
P. V. Kane, MD, Macomb
P. T. Lahti, MD, Oakland
R. M. Stow, MD, Ingham
G. M. Wilson, Jr., MD, Marquette-Alger

Councilor Advisor:

R. V. Taylor, MD, Jackson

MISCELLANEOUS BUSINESS

H. A. Towsley, MD, Chairman, Washtenaw
P. J. Connolly, MD, Wayne
F. S. Gillett, MD, Kent
R. H. Hamburg, MD, Wayne
R. J. Huebner, MD, Barry
J. W. Sigler, MD, Wayne

Councilor Advisors:

E. R. Elzinga, MD, Marquette
A. C. Stander, MD, Saginaw

NEWS COMMITTEE

J. J. Lightbody, MD, Chairman, Wayne
L. F. Hayes, MD, North Central Counties
C. Allen Payne, MD, Kent

REPORTS OF THE COUNCIL

D. N. Sweeny, Jr., MD, Chairman, Wayne
V. V. Bass, MD, Saginaw
E. E. Elder, Jr., MD, Oakland
E. J. Igna, MD, Wayne
W. F. Sutter, MD, Mason
J. A. Witter, MD, Wayne

Councilor Advisors:

H. H. Hiscock, MD, Flint
R. J. Mason, MD, Birmingham
R. K. Whiteley, MD, Detroit

REPORTS OF OFFICERS

H. W. Harris, MD, Chairman, Ingham
Jack Hoogerhyde, MD, Kent
J. M. Kennary, MD, Wayne
F. A. Kennedy, MD, Berrien
A. B. Levant, MD, Wayne
J. M. Wood, MD, Gratiot-Isabella-Clare

Councilor Advisors:

D. W. McLean, MD, Detroit
J. J. Coury, MD, Port Huron

REPORTS OF SPECIAL COMMITTEES

J. C. Danforth, MD, Chairman, Wayne
S. N. Kelso, MD, Monroe
J. W. Moses, MD, Wayne
Sidney Scher, MD, Macomb
H. M. Smathers, MD, Wayne
J. H. Tisdel, MD, St. Clair

Councilor Advisor:

J. R. Pedden, MD, Grand Rapids

REPORTS OF STANDING COMMITTEES

H. C. Tellman, MD, Chairman, Muskegon
F. B. Bicknell, MD, Wayne
A. L. Brown, MD, Oakland
H. A. Howes, MD, Wayne
Marjorie P. Meyers, MD, Wayne
B. C. Payne, MD, Washtenaw

Councilor Advisors:

E. H. Rodda, MD, Bay City
Don Marshall, MD, Kalamazoo

RESOLUTIONS

H. F. Falls, MD, Chairman, Washtenaw
D. D. Finlayson, MD, Chippewa-Mackinac
H. M. Golden, MD, Genesee
H. R. Hume, Jr., MD, Wayne
Benjamin Jeffries, MD, Wayne
R. C. Prophater, MD, Bay-Arenac-Iosco
W. J. Yott, MD, Wayne

Councilor Advisors:

D. R. Smith, MD, Iron Mountain
M. R. Weed, MD, Grosse Pointe Park

RULES AND ORDER OF BUSINESS

C. W. Oakes, Jr., MD, Chairman, Huron
F. W. Whitehouse, MD, Wayne

SPECIAL MEMBERSHIPS

R. C. Rowan, MD, Chairman, Calhoun
H. A. Scovill, MD, Washtenaw
George Mogill, MD, Wayne

WAYS AND MEANS

F. C. Brace, MD, Chairman, Kent
Z. S. Bohn, MD, Wayne
L. S. Eno, MD, Wayne
H. E. Malcolm, MD, Ingham
C. M. McColl, MD, Wayne
H. L. Oster, MD, Jackson

Councilor Advisors:

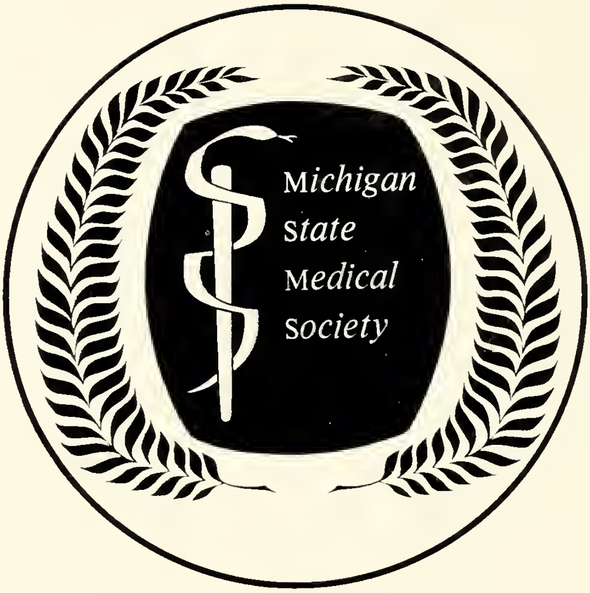
C. A. Payne, MD, Grand Rapids
R. K. Whiteley, MD, Detroit

PARLIAMENTARIAN

H. M. Golden, MD, Genesee

TELLERS

G. T. Bradley, MD, Wayne
B. P. Brown, MD, Eaton
L. E. Heideman, MD, Wayne


Michigan
State
Medical
Society

This new Michigan State Medical Society Seal was originated for the MSMS Centennial in 1965. The cover art, by Robert Deady, features an enlargement of the Staff of Aesculapius.

10 4515

THE LIBRARY
UNIVERSITY OF CALIFORNIA
San Francisco Medical Center
THIS BOOK IS DUE ON THE LAST DATE STAMPED BELOW

7 ~~5~~ DAY LOAN

5 DAY
MAR 3 0 1969
RETURNED
MAR 2 5 1969
7 DAY
NOV 2 5 1969
RETURNED
NOV 1 8 1969
7 DAY
FEB 9 1970
RETURNED
FEB 9 1970

7m-2,'69(J6525s4)4315—A33-9

206482